UNIVERSITY OF ILLINOIS EXTENSION

Grain Price OUTLOOK

A joint publication of the Department of Agricultural Economics, College of Agriculture, Purdue University, West Lafayette, Indiana, and the Department of Agricultural and Consumer Economics, College of Agricultural, Consumer and Environmental Sciences, University of Illinois at Urbana-Champaign.

SOYBEANS: DECLINING EXPORTS, LARGE STOCKS

JANUARY 2006 ***Darrel Good*** **2006 – No. 2**

Summary

At 3.086 billion bushels, the 2005 U.S. soybean crop was 43 million larger than the November forecast and only 38 million smaller than the record crop of 2004. The U.S. average yield is estimated at a record 43.3 bushels per acre, 0.6 bushels higher than the November forecast and 1.1 bushels above the previous record yield of 2004. Harvested acreage of soybeans in 2005 totaled 71.361 million, the lowest figure since 1998.

The USDA estimated that December 1, 2005 stocks of soybeans in the U.S. at a record 2.502 billion, nearly 200 million more than on the same date last year. Consumption of U.S. soybeans during the first quarter of the 2005-06 marketing year was at a 5 year low of 840 million bushels due to a very slow export pace and a modest level of feed and residual use. The USDA projects stocks of U.S. soybeans at the end of the current marketing year at 505 million bushels, the largest since the record level of stocks (536 million) at the end of the 1985-86 marketing year.

The average farm price of soybeans during the first four months of the 2005-06 marketing year was near $5.70, much higher than would be expected given the significant surplus of U,.S. and world soybeans. For the year, the USDA projects the average farm price in a range of $5.10 to $5.80. The midpoint of that range, $5.45, implies lower average prices during the final 8 months of the marketing year. Based on the historic relationship between the year ending stocks-to-use ratio and the marketing year average farm price, a carryover of 505 million bushels would suggest an average price near the low end of the USDA's projected range. An average that low would require a sharp decline in prices over the next 8 months. The fate of the South American crop and prospects for the U.S. crop, along with speculative futures trading, will determine if prices move lower or continue the strength being experienced in late January.

U.S. Production Estimate Increased

the 2005 U.S. soybean crop turned out to be much larger than expected late in the growing season. The larger crop, now estimated at 3.086 billion bushels, was a result of higher than expected yields. The 2005 U.S. average yield is estimated at 43.3 bushels per acre, 0.6 bushels higher

than the November forecast and 1.1 bushel above the previous record yield of 2004 (Table 1). After spiking to 41.4 bushels in 1994, U.S. average yields were in range of 33.9 to 39.6 bushels from 1995 through 2003, raising concerns about the yield potential of soybeans in the U.S. The record yields of the past two years may have put those concerns to rest.

The 2005 average yield of 43.3 bushels per acre was 2.5 bushels higher than suggested by the USDA crop condition ratings at the end of the season. The percent of the crop rated in good or excellent condition at the end of the growing season explained about 87 percent of the variation in annual average yields from 1986 through 2004. That relationship pointed to an average yield of 40.8 bushels in 2005. Models that correlate state average yields to trend and average monthly state weather variables have been developed for Illinois, Indiana, and Iowa. For 2005, the average state yield was 1.9 bushels higher than projected in Illinois, 0.2 bushels lower than projected in Indiana, and 4.4 bushels higher than projected in Iowa. It appears that the surprise in yields in 2005 did not come in the dry areas, but in areas with relatively good growing conditions.

The 2005 U.S. soybean crop was only 38 million bushels smaller than the record crop of 2004 and only the second crop that has exceeded 3 billion bushels (Table 2). The January estimate of crop size was 245 million bushels (10.6 percent) larger than the USDA's August forecast. The difference was large by historic standards, but the percentage increase from August to January was not as large as in 1994 (12.1 percent).

The larger than expected crop materialized even though soybean acreage declined significantly from that of 2004 and was well below the early 2005 estimates. Actual planted acreage of soybeans in 2005 is estimated at 72.143 million, 58,000 below the November forecast, 961,000 less than reported in June, 1.768 million less than producers indicated in March 2005, and 3.066 million less than planted in 2004 (Table 3). Harvested acreage of soybeans in 2005, however, was only 2.597 million less than harvested acreage in 2004. Unharvested area of 781,000 acres in 2005 is at the very low end of historical experience.

About half of the decline (1.55 million acres) in planted acreage of soybeans in 2005 came in western corn belt states. Acreage declined by 540,000 in eastern corn belt states and 976,000 in the rest of the country (Table 4). Still, over half of the U.S. soybean acreage was planted in the western corn belt in 2005. The share of the acreage in southern states declined to about 15 percent.

Record Large Stocks on December 1

Stocks of U.S. soybeans on December 1, 2005 stood at a record 2.5 billion bushels, nearly 200 million more than stocks of a year earlier (Table 5). Much of that increase was in off-farm facilities as on-farm stocks of corn ware up from that of a year ago. The estimated level of December 1 stocks implies that 840.4 million bushels of U.S. soybeans were consumed during the first quarter of the current marketing year. That is 92 million less than first quarter consumption of a year ago and the lowest level of use in 5 years. The U.S. Census Bureau indicated that the first quarter crush of

soybeans was a record 442.3 million bushels, 14.9 million more than the crush during the first quarter of the 2004-05 marketing year. The crush in December 2005 reached only 148 million bushels, two million less than in December 2004. Cumulative crush for the first four months of the year, then, is only 12.9 million above that of a year ago.

Census Bureau and USDA estimates of soybean exports indicated that first quarter shipments totaled only 315.6 million bushels, 90.2 million, or 22.2 percent, less than shipments of a year earlier. First quarter exports were the lowest in 6 years. Seed, food and residual use of soybeans (all calculated as a residual) is estimated at 82.5 million bushels, nearly 17 million less than during the same quarter last year. The quarterly pattern of seed, feed and residual use varies significantly from year to year and serves mainly as a double-check of the estimate of crop size. The relatively low level of use this year indicates the production estimate of 3.086 billion bushels is likely very close to actual crop size.

The domestic crush of soybeans is driven primarily by soybean meal demand. That is particularly true this year since the average oil content of the 2005 soybean crop is record high. At 11.65 pounds, the expected average yield is nearly one quarter pound higher than the average yield of the 2004 crop and nearly one half pound higher than the average yield from the 2003 crop. An increase in domestic meal consumption this year is being driven by a modest increase in livestock and poultry numbers and some increase in average slaughter weights of both cattle and hogs. The USDA projects a 2.2 percent increase in domestic meal consumption this year. The USDA projects a decline of 740,000 tons (10 percent) in U.S. meal exports from the relatively high level of last year. As of January 19, the USDA's *Export Sales* report showed that meal export shipments to date plus unshipped sales were 5 percent less than the total of a year earlier. Four months into the 2005-06 marketing year for meal, the USDA projections appear to be reasonable and are used here (Table 6).

At the projected level of consumption, meal use would require the crush of 1.73 billion bushels of soybeans during the 2005-06 marketing year if the average meal yield from the 2005 crop is near the 47.2 pounds average experienced in the first four months of the year. That average would be about .8 pounds less than the yield from the 2004 crop and about .3 pounds below the average yield of the 2003 crop. The lower yield this year reflects the higher oil content of the 2005 crop. The slower rate of crush in December 2005, along with a build-up in meal stocks during the month, is a red flag that the crush projection for the year may be too high.

If 1.73 billion bushels of soybeans are crushed during the current marketing year, about 20.955 billion pounds of soybean oil will be produced. Domestic soybean oil consumption has tended to increase about 2 percent per year, about in line with population growth. Last year, however, use increased by 3.4 percent as prices declined and bio-diesel production expanded. A 3.5 percent increase this year would put total domestic use at 18.05 billion pounds, just below the USDA projection of 18.1 billion pounds. The USDA forecasts U.S. soybean oil exports at 1.35 billion pounds, about equal to

exports of last year. As of January 19, the total commercial export shipments of U.S. oil plus unshipped sales totaled about 395 million pounds, 45 percent less than commitments of a year ago. The USDA's export projection may be a bit optimistic. We are using a forecast of 1.3 billion pounds. At the projected level of consumption, U.S. soybean oil stocks at the end of the current marketing year would total 2.569 billion pounds, 870 million larger than stocks at the beginning of the year and the largest year ending inventory in 5 years (Table 7).

The pace of U.S. soybean exports has continued to be relatively slow since December 1, 2005. As of January 19, cumulative export shipments were 27 percent behind the shipments of a year ago. The pace relative to that of a year ago actually showed even more during the six weeks since December 1. Unshipped sales of soybeans on January 19 totaled only 166 million bushels, compared to 188 million on the same date last year. Only Taiwan and Mexico have purchased more U.S. soybeans than at this time last year. Sales to the major buyers, the European Union and China were down by 63 percent and 27 percent respectively. The decline reflects lost market share to Brazil as Chinese imports from all sources are expected to be 60 million bushels larger this year than imports of a year ago.

The USDA now forecasts U.S. soybean exports during the 2005-06 marketing year at 950 million bushels, 153 million (or 14 percent) fewer soybeans than exported last year. The forecast is 165 million less than forecast last fall. The pace of exports and export sales will have to accelerate to reach that projected level. One of the factors that will influence the magnitude of U.S. exports this year is the size of the South American soybean harvest in 2006. The USDA currently projects the Brazilian crop at 2.15 billion bushels, 200 million larger than the 2005 harvest. The Argentine crop is projected at 1.488 billion, 55 million larger than the 2005 harvest (Table 8). For all of South America, production is expected to reach 3.9 billion bushels, 295 million larger than the 2005 harvest. For Brazil, the larger crop is expected to come from a 6 percent decline in acreage and a 17 percent increase in average yields (Table 9). Yields were reduced significantly the past two years to drought conditions in southern Brazil. For Argentina, acreage is thought to be up 5.5 percent and the average yield is expected to be about 2 percent below the high average of a year ago.

The critical part of the South American growing condition is yet to come. Early dryness in Argentina has been replaced with more normal precipitation in January, but it is not clear how much yield reduction, if any, has occurred or if dry weather will persist. If production in South America is near the projected level, U.S. soybean exports may fall short of the current projection of 950 million bushels. We are using a projection of 930 million bushels. At the projected level of consumption of U.S. soybeans, stocks at the end of the current marketing year would total 525 million bushels, only 11 million below the record level of stocks at the end of the 1985-86 marketing year (Table 11).

U.S. Soybean Acreage to Increase in 2006?

U.S. soybean acreage declined sharply in 2005 as corn acreage increased and total

planted acres of all crops declined. Planted acreage of principal crops in the U.S. declined by 3.3 million acres in 2004 and another 4.6 million acres in 2004. The two-year decline represented a 2.4 percent reduction in planted acreage. The decline was widely spread geographically, but the largest decline, 1.7 million acres, was in Texas. While planted acreage of principal crops declined by nearly 8 million acres in the past two years, harvested acreage declined by only 3.8 million.

For 2006, the early thinking is that soybean acreage will be larger than in 2005. The primary reason is that the potential profitability of soybeans exceeds that of second year corn in many areas due to the sharp increase in production costs for corn. For many, planting decisions have not been finalized and changes in relative prices of corn and soybean can still influence decisions. Several factors may limit the increase in soybean acreage. First, many producers prefer growing corn. Second, many corn producers are tied to corn production due to livestock production, food grade corn contracts and commitments to ethanol plants. Third, many producers can reduce cost of growing corn by adhering to the new, lower Nitrogen application rates being recommended in the corn belt. Additionally, lower natural gas prices point to lower anhydrous ammonia prices. Fourth, the 934,000 acreage increase in winter wheat seedings will reduce the availability of acreage for spring planted crops. Wheat acreage in the eastern corn belt is up by more than 500,000 acres.

The USDA will survey producers planting intentions in March and release the *Prospective Plantings* report on March 31. At this juncture, we anticipate an increase in planted acreage of about 1 million acres, and an increase in harvested acreage of 800,000 to a total of 72.14 million. A national average yield of about 42 bushels, then, would produce a 2006 crop of 3.03 billion bushels. A crop of that size would lead to a further buildup in inventory during the 2006-07 marketing year. It may be the job of the market to discourage soybean acreage in the U.S. in 2006, depending on how the 2006 South American crop turns out.

Price Prospects

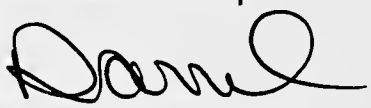
The average U.S. farm price during the first 4 months of the 2005-06 marketing year averaged about $5.70 per bushel. That price is very near the fall marketing year average for 2004-05 even though the surplus of soybeans is much larger than that of a year ago. The high prices, particularly the surge in late December 2005, did not appear warranted and may have served to discourage consumption rather than encourage consumption. However, the early high price will influence the average price for the year since more than 40 percent of the 2005 crop was likely sold at those prices. The USDA now projects the marketing year average price in a range of $5.10 to $5.80. At the close of trade on January 27, the futures market reflected an average farm price for the remainder of the marketing year of about $5.85. If prices remained unchanged, then, the average farm price for the 2005-06 marketing year would be near $5.80. Our model that correlates the historical year ending stocks-to-use ratio (which we project at 18.65 percent) to the marketing year average price would suggest a 2005-06 marketing year average price under $5.00 per bushel. The soybean market

appears to still be significantly over valued, even with the price declines of mid-January.

Why are prices so high in light of huge surpluses in the U.S., decent crop conditions in South American, and the expectation that U.S. soybean acreage will increase in 2006? Some point to the influence of speculative traders that have supported prices above value. Others tend to just want to trust the market, believing that while there is no apparent fundamental reason for high prices, the reason will be revealed later in the form of a demand surge or crop problems. A third alternative is that the market has made a mistake and that sharp price declines will be required. A marketing year average price of $5.40 is projected here, suggesting that prices will in fact decline.

The lowest cash price to date in central Illinois during the current marketing year is $5.15, occurring on October 10, 2005. That low is $.35 above the low of the 2004-05 marketing year ($4.80 on October 13, 2004). The highest cash price to date is $6.035, occurring on January 4, 2006. The range from high to low of $.885 will likely be exceeded before the marketing year is completed on August 31, 2006. Based on current fundamentals, a new marketing year low would be expected and would likely occur in the summer of 2006 if both the South American and U.S. crops escape major damage. However, a marketing year high cash price occurring in January is very rare, occurring only once in the past 32 years. Ironically, that was in 1985-86, the year of record large year ending stocks of U.S. soybeans, a situation much like that expected this year.

At this time, there appears little reason for soybean prices to go higher. However, uncertainty about the South American crop and threats to the 2006 U.S. crop will likely provide an opportunity for at least one more price rally, particularly if speculative buying interest remains strong. That rally would also provide an opportunity for pricing some of the 2006 crop. As of January 27, the futures market reflected a 2006-07 marketing year average farm price of about $6.10. For that price to persist until harvest would require the 2006 U.S. soybean harvest to be about 15 percent smaller than the 2005 crop.



Issued by Darrel Good
Extension Economist
University of Illinois

Table1. United States Soybean Yield Estimates

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
	million bushels																										
August 1	30.3	27.4	30.2	32.3	29.7	30.5	31.5	32.9	34.7	26.0	32.3	32.5	31.8	35.8	33.8	37.6	36.4	36.3	39.5	39.5	39.2	40.7	38.7	36.5	39.4	39.1	38.7
September 1	30.9	27.0	31.2	32.6	24.9	30.3	33.2	33.1	34.0	25.9	32.0	32.4	31.0	35.9	34.0	38.2	37.0	35.8	39.3	40.6	37.9	39.5	38.2	37.0	36.4	38.5	39.6
October 1	31.5	26.0	31.5	32.4	24.7	29.5	33.9	33.3	34.2	26.4	32.6	32.3	33.0	36.3	33.7	40.5	35.5	37.0	39.0	38.7	37.0	38.7	39.2	37.0	34.0	42.0	41.6
November 1	31.8	26.5	31.0	32.4	25.0	28.5	34.2	33.8	34.1	26.6	32.8	33.7	33.5	37.3	32.7	41.5	35.4	37.9	39.2	38.6	36.7	38.0	39.4	37.5	33.8	42.6	42.7
January 1	32.2	26.8	30.4	32.2	25.7	28.2	34.1	33.8	33.7	26.8	32.4	34.0	34.3	37.6	32.0	41.9	34.9	37.6	39.0	38.9	36.5	38.1	39.6	37.8	33.4	42.5	43.3
FINAL	32.1	26.5	30.1	31.5	26.2	28.1	34.1	33.3	33.9	27.0	32.3	34.1	34.2	37.6	32.6	41.4	35.3	37.6	38.9	38.9	36.6	38.1	39.6	38.0	33.9	42.2	

Table 2. United States Soybean Production Estimates

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
	million bushels																										
August 1	2,130	1,880	2,017	2,293	1,843	2,035	1,959	1,979	2,000	1,474	1,905	1,836	1,869	2,079	1,902	2,282	2,246	2,300	2,744	2,825	2,870	2,989	2,867	2,628	2,862	2,877	2,791
September 1	2,174	1,831	2,089	2,314	1,535	2,028	2,063	1,980	1,957	1,472	1,889	1,835	1,817	2,085	1,909	2,316	2,285	2,270	2,746	2,909	2,778	2,900	2,834	2,656	2,643	2,836	2,856
October 1	2,213	1,757	2,107	2,300	1,517	1,972	2,108	1,992	1,968	1,501	1,926	1,823	1,934	2,108	1,891	2,458	2,190	2,346	2,722	2,769	2,696	2,823	2,907	2,654	2,468	3,107	2,967
November 1	2,236	1,775	2,077	2,300	1,535	1,902	2,129	2,009	1,960	1,512	1,937	1,904	1,962	2,167	1,834	2,523	2,183	2,403	2,736	2,763	2,673	2,777	2,923	2,690	2,452	3,150	3,043
January 1	2,268	1,817	2,030	2,277	1,595	1,861	2,099	2,007	1,905	1,539	1,927	1,922	1,986	2,197	1,809	2,558	2,152	2,382	2,727	2,757	2,643	2,770	2,891	2,730	2,418	3,141	3,086
FINAL	2,261	1,798	1,989	2,190	1,636	1,861	2,099	1,943	1,938	1,549	1,924	1,926	1,987	2,190	1,870	2,515	2,174	2,380	2,689	2,741	2,654	2,758	2,891	2,756	2,454	3,124	

Table 3. Soybean Planting Intentions, Actual Plantings, and Acres Harvested

Year	January Intentions	Mar./April Intentions	June/July Intentions	Actual	Harvested Acreage
			million acres		
1975	57.5	56.6	54.6	54.6	53.8
1976	50.9	49.3	49.0	50.3	49.4
1977	53.1	55.7	59.0	59.0	57.6
1978	63.9	63.7	64.0	64.7	63.3
1979	66.3	68.8	71.6	71.4	70.3
1980	71.6	71.3	70.3	69.9	67.8
1981	----	69.8	68.5	67.5	66.2
1982	69.5[a]	---	72.2	70.9	69.4
1983	68.8[a]	65.8[b]	63.3	63.8	62.5
1984	65.2[a]	---	68.0	67.8	66.1
1985	64.4[a]	---	63.3	63.1	61.6
1986	---	62.0	61.8	60.4	58.3
1987	---	56.9	58.7	58.180	57.172
1988	---	58.0	58.5	58.840	57.373
1989	---	61.7	61.3	60.820	59.282
1990		59.42	58.05	57.795	56.283
1991	58.5	57.12	59.78	59.180	58.169
1992		57.42	59.03	59.180	58.233
1993		59.30	61.58	60.085	57.307
1994		61.12	61.78	61.620	60.809
1995		61.45	63.105	62.495	61.544
1996		62.478	63.895	64.195	63.349
1997		68.800	70.850	70.005	69.110
1998		72.000	72.720	72.025	70.441
1999		73.105	74.205	73.730	72.446
2000		74.871	74.501	74.266	72.408
2001		76.657	75.416	74.075	72.975
2002		72.966	72.993	73.963	72.497
2003		73.182	73.653	73.404	72.476
2004		75.411	74.809	75.208	73.958
2005		73.910	73.103	72.142	71.361

[a] February 1

[b] May 1

Table 4. Planted Acres of Soybeans by Region

	Western Corn Belt[a]		Eastern Corn Belt[b]		Mid-South[c]		Southeast[d]		East Coast[e]		United States	
Region	000 acres	%	000 acres	%	000 acres	%	000 acres	%	000 acres	%	000 acres	%
1976	16,145	32.1	14,530	28.9	13,630	27.1	4,799	9.6	1,122	2.3	50,226	100.0
1979	23,370	32.7	19,620	27.5	18,470	25.9	8,360	11.7	1,591	2.2	71,411	100.0
1986	24,875	41.2	18,300	30.3	10,995	18.2	4,680	7.8	1,535	2.5	60,385	100.0
1987	24,120	41.5	18,580	31.9	10,330	17.8	3,675	6.3	1,475	2.5	58,180	100.0
1988	24,310	41.3	18,680	31.7	10,460	17.8	3,810	6.5	1,580	2.7	58,840	100.0
1989	24,790	40.8	19,020	31.3	10,750	17.7	4,460	7.3	1,800	2.9	60,820	100.0
1990	23,750	41.1	18,490	32.0	10,270	17.2	3,650	6.3	1,635	2.8	57,795	100.0
1991	26,035	44.0	19,420	32.8	8,990	15.2	3,005	5.1	1,730	2.9	59,180	100.0
1992	25,400	42.9	20,000	33.8	8,980	15.2	2,915	5.2	1,715	2.9	59,180	100.0
1993	25,300	42.1	20,410	34.0	9,690	16.1	2,915	4.9	1,770	2.9	60,085	100.0
1994	27,220	44.1	20,510	33.3	9,220	15.0	2,875	4.7	1,795	2.9	61,620	100.0
1995	28,210	45.1	21,130	33.8	9,130	14.7	2,290	3.6	1,735	2.8	62,495	100.0
1996	28,250	44.0	22,370	34.8	9,390	14.6	2,565	4.0	1,620	2.5	64,195	100.0
1997	32,450	46.4	22,610	32.3	10,390	14.8	2,777	4.0	1,778	2.5	70,005	100.0
1998	33,700	46.8	23,650	32.8	10,180	14.1	2,690	3.8	1,805	2.5	72,025	100.0
1999	35,800	48.5	24,100	32.7	9,700	13.2	2,360	3.2	1,770	2.4	73,730	100.0
2000	37,050	49.9	24,050	32.4	9,010	12.1	2,230	3.0	1,926	2.6	74,266	100.0
2001	37,700	50.9	24,650	33.3	7,685	10.4	2,135	2.9	1,905	2.5	74,075	100.0
2002	37,070	50.1	24,740	33.5	8,170	11.0	2,145	2.9	1,838	2.5	73,963	100.0
2003	37,650	51.3	23,770	32.4	7,990	10.9	2,253	3.0	1,741	2.4	73,404	100.0
2004	38,000	50.5	23,550	31.4	9,100	12.1	2,579	3.4	1,979	2.6	75,208	100.0
2005	36,450`	50.5	23,010	31.9	8,495	11.8	2,259	3.1	1,928	2.7	72,142	100.0

[a] Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota

[b] Illinois, Indiana, Michigan, Ohio, Wisconsin

[c] Arkansas, Kentucky, Louisiana, Mississippi, Oklahoma, Tennessee, Texas

[d] Alabama, Florida, Georgia, North Carolina, South Carolina

e Delaware, Maryland, New Jersey, New York, Pennsylvania, Virginia, West Virginia

Table 5. Soybean Quarterly Balance Sheet

	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
													million bushels											
September 1 stocks	254.5	344.6	175.7	316.1	536.4	436.4	302.5	182.0	239.1	329.0	278.4	292.3	209.1	334.8	183.5	131.8	199.8	348.5	290.2	247.7	208.0	178.3	112.4	255.7
Production	2,190.3	1,635.8	1,860.9	2,099.1	1,942.6	1,937.7	1,548.8	1,923.8	1,925.9	1,986.6	2,190.4	1,869.7	2,514.9	2,174.3	2,380.3	2,688.8	2,741.0	2,653.8	2,757.8	2,890.7	2,756.1	2,453.7	3,123.7	3,086.4
TOTAL	2,444.8	1,980.4	2,036.6	2,415.2	2,479.0	2,374.1	1,855.3	2,108.8	2,167.0	2,319.6	2,470.8	2,167.0	2,730.0	2,514.1	2,572.8	2,825.6	2,943.8	3,006.3	3,052.0	3,141.3	2,968.8	2,637.6	3,241.7	3,346.1
September-November																								
Crush	284.2	269.6	253.7	267.5	295.8	293.4	275.4	273.0	304.1	322.0	328.2	329.6	346.2	351.4	360.6	395.8	409.3	426.7	420.9	427.5	417.5	419.4	427.4	442.3
Export	245.9	190.6	153.4	166.5	216.5	260.8	138.3	168.5	120.1	167.1	235.9	176.0	230.9	233.6	289.7	365.3	268.5	297.8	315.5	348.6	320.4	385.7	405.8	315.6
Seed, residual	-36.2	48.5	14.8	21.5	10.1	64.6	74.8	56.6	58.8	51.5	70.7	79.8	50.9	95.7	97.4	66.9	78.5	98.9	75.6	89.6	112.3	140.5	99.3	82.5
TOTAL	493.9	508.7	421.9	455.4	522.4	618.8	488.5	498.1	483.0	540.6	634.8	585.4	628.0	681.7	747.7	826.2	758.8	823.4	812.0	865.7	850.2	945.6	932.4	840.4
December 1 stocks	1,950.9	1,471.7	1,614.7	1,959.8	1,956.6	1,755.3	1,366.8	1,610.7	1,684.0	1,779.0	1,836.0	1,573.6	2,102.0	1,833.4	1,825.1	1,999.4	2,186.4	2,182.7	2,240.0	2,275.6	2,115.4	1,688.7	2,304.6	2,502.4
Crush	314.9	262.5	276.4	281.9	320.1	317.3	286.3	304.3	301.4	323.1	335.2	327.2	371.8	359.0	400.7	443.1	408.6	408.1	417.9	447.6	422.0	423.2	436.2	
Export	263.6	234.6	230.2	270.9	233.7	258.9	197.0	217.0	179.7	259.6	255.9	212.7	283.5	278.7	333.1	306.4	243.1	315.4	338.4	422.7	425.5	335.1	400.2	
Seed, residual	26.6	18.8	47.0	35.7	63.8	33.0	-6.7	33.9	12.8	19.6	29.3	12.1	76.5	5.3	35.5	46.9	77.0	63.2	79.8	69.3	66.9	25.9	88.3	
TOTAL	605.1	515.9	553.6	588.5	617.6	609.2	476.6	555.2	493.9	602.3	620.4	552.0	731.8	643.0	769.3	796.5	728.7	786.7	836.1	939.6	914.4	784.2	924.7	
March 1 stocks	1,345.8	955.8	1,061.1	1,371.3	1,339.0	1,146.1	890.2	1,055.5	1,190.1	1,177.3	1,215.6	1,021.6	1,370.2	1,190.4	1,055.8	1,202.9	1,457.3	1,396.0	1,403.9	1,336.0	1,202.0	905.8	1,381.4	
Crush	260.1	240.0	258.2	262.3	297.2	308.3	270.1	290.7	295.5	304.0	325.4	320.4	361.7	334.0	355.7	404.9	396.4	373.9	405.4	429.6	400.2	359.5	430.7	
Export	216.2	204.2	153.4	226.4	159.3	185.0	135.5	153.2	146.9	148.2	186.7	120.6	216.6	188.5	165.9	120.0	161.9	205.8	220.8	155.0	194.4	117.6	211.2	
Seed, residual	78.9	39.9	41.1	33.7	45.7	-2.5	20.1	15.7	24.2	29.4	20.1	25.3	0.0	44.9	34.3	84.4	50.4	58.9	69.5	66.5	6.3	19.1	41.1	
TOTAL	555.2	484.1	452.7	522.4	502.2	490.8	425.7	459.6	466.6	481.6	532.2	466.3	578.3	567.4	555.9	609.2	608.7	621.8	695.7	651.1	600.9	496.2	683.1	
June 1 stocks	790.6	471.7	608.4	848.9	836.8	655.3	464.5	595.9	723.5	695.7	683.4	555.3	791.9	622.8	499.9	593.7	848.6	774.4	708.2	684.9	602.4	410.6	699.3	
Crush	248.8	210.8	242.1	241.1	265.5	255.5	225.8	278.4	285.9	304.6	290.0	298.4	325.5	324.9	318.7	353.2	375.4	370.1	395.8	395.0	375.6	327.6	401.8	
Export	179.5	113.6	61.1	76.3	147.4	97.6	56.2	84.2	110.4	109.0	91.0	79.7	107.0	150.5	93.0	78.7	127.5	171.6	121.3	137.2	104.1	48.5	85.5	
Seed, residual	17.7	-28.2	-10.9	-4.9	-12.5	0.3	0.5	-5.8	-1.8	3.1	10.1	-31.9	24.6	-35.2	-43.6	-37.9	-1.3	-55.0	-56.6	-55.3	-54.7	-71.0	-41.3	
TOTAL	446.0	296.0	292.3	312.5	400.4	352.8	282.5	356.8	394.5	416.7	391.1	346.2	457.1	439.6	368.1	393.9	501.6	486.7	460.5	476.9	425.0	299.1	446.0	
September 1 stocks	344.6	175.7	316.1	536.4	436.4	302.5	182.0	239.1	329.0	278.4	292.3	209.1	334.8	183.5	131.8	199.8	348.5	290.2	247.7	208.0	178.3	112.4	255.7	
Annual																								
Crush	1,108.0	982.7	1,030.4	1,052.8	1,178.7	1,174.5	1,057.6	1,146.4	1,186.9	1,253.7	1,278.8	1,275.6	1,405.2	1,369.4	1,435.7	1,595.1	1,589.7	1,578.8	1,650.0	1,699.7	1,615.3	1,529.7	1,696.1	
Export	905.2	743.0	598.1	740.1	756.9	801.7	527.0	622.9	557.1	683.9	769.5	589.0	838.0	851.2	881.7	870.4	801.0	973.8	996.0	1,063.5	1,045.0	887.2	1,102.7	
Seed, residual	87.0	79.0	92.0	85.9	107.0	95.4	88.7	100.4	94.0	103.6	130.2	85.3	152.0	110.4	123.6	160.3	204.6	166.2	168.3	170.1	130.2	108.5	187.4	
TOTAL	2,100.2	1,804.7	1,720.5	1,878.8	2,042.6	2,071.6	1,673.3	1,869.7	1,838.0	2,041.2	2,178.5	1,949.9	2,397.0	2,330.9	2,441.0	2,625.8	2,595.3	2,718.8	2,803.1	2,933.3	2,790.5	2,525.5	2,986.2	

Table 6. Soybean Meal Balance Sheet -- Years Beginning October 1

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
	thousand tons																
Beginning stocks	173	318	285	230	204	150	223	212	210	218	330	293	383	240	220	211	172
Production	27,719	28,325	29,831	30,364	30,514	33,270	32,527	34,210	38,176	37,792	37,591	39,385	40,292	38,213	36,325	40,707	40,813
TOTAL[a]	27,982	28,688	30,183	30,687	30,788	33,483	32,825	34,524	38,443	38,109	37,970	39,729	40,818	38,619	36,830	41,075	41,150
Domestic	22,291	22,934	23,007	24,251	25,283	26,542	26,611	27,320	28,895	30,657	30,345	31,643	33,070	32,379	31,449	33,563	34,300
Exports	5,319	5,469	6,946	6,232	5,356	6,717	6,002	6,994	9,330	7,122	7,332	7,703	7,508	6,019	5,170	7,340	6,600
TOTAL	27,610	28,403	29,953	30,483	30,639	33,260	32,613	34,314	38,225	37,779	37,677	39,346	40,578	38,399	36,619	40,903	40,900
Ending stocks	318	285	230	204	150	223	212	210	218	330	293	383	240	220	211	172	250
Price[b]	$186.48	$181.38	$189.21	$193.75	$192.86	$162.55	$235.92	$270.90	$185.28	$138.55	$167.70	$173.60	$167.73	$181.57	$256.05	$182.89	$170.00

[a] Includes imports

[b] Bulk, Decatur, Illinois 48%

Table 7. Soybean Oil Balance Sheet -- Years Beginning October 1

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
	million pounds																
Beginning stocks	1,715	1,305	1,786	2,239	1,555	1,103	1,137	2,015	1,520	1,382	1,520	1,995	2,767	2,358	1,489	1,076	1,699
Production	13,003	13,406	14,346	13,778	13,951	15,613	15,240	15,752	18,143	18,081	17,825	18,420	18,898	18,438	17,080	19,360	20,155
TOTAL[a]	14,740	14,728	16,132	16,027	15,574	16,733	16,472	17,821	19,723	19,546	19,427	20,488	21,711	20,843	18,875	20,462	21,919
Domestic	12,082	12,163	12,246	13,053	12,941	12,916	13,465	14,263	15,262	15,655	16,056	16,320	16,833	17,089	16,864	17,439	18,050
Exports	1,353	779	1,647	1,419	1,529	2,680	992	2,037	3,079	2,372	1,376	1,401	2,519	2,263	936	1,324	1,300
TOTAL	13,435	12,942	13,893	14,472	14,471	15,596	14,457	16,300	18,341	18,027	17,432	17,721	19,353	19,352	17,800	18,762	19,350
Ending stocks	1,305	1,786	2,239	1,555	1,103	1,137	2,015	1,520	1,382	1,520	1,995	2,767	2,358	1,491	1,076	1,699	2,569
Average Price[b]	22.3¢	21.0¢	19.1¢	21.4¢	27.1¢	27.6¢	24.75¢	22.5¢	25.8¢	19.9¢	15.6¢	14.2¢	16.5¢	22.0¢	30.0¢	23.0¢	21.0¢

[a] Includes imports

[b] Bulk, Decatur, Illinois

Table 8. Soybean Production by Country

Year	United States	Brazil[a]	Argentina[a]	Paraguay[a]	China	Other	World	All Foreign
				million bushels				
1970	1,127	76	2	3	254	165	1,627	500
1971	1,176	135	3	4	290	126	1,734	558
1972	1,283	184	10	4	320	66	1,867	584
1973	1,547	289	18	7	367	64	2,292	745
1974	1,215	363	18	8	349	54	2,007	792
1975	1,547	413	26	10	367	46	2,409	862
1976	1,288	460	51	14	242	128	2,183	895
1977	1,762	350	99	12	266	154	2,643	881
1978	1,870	557	136	20	278	167	2,847	977
1979	2,261	376	132	21	274	191	3,255	994
1980	1,798	558	129	22	292	176	2,975	1,177
1981	1,989	471	152	22	342	186	3,162	1,173
1982	2,190	542	154	19	332	200	3,437	1,247
1983	1,636	571	257	20	359	213	3,056	1,420
1984	1,861	672	248	35	356	248	3,421	1,561
1985	2,099	518	268	22	386	272	3,565	1,466
1986	1,943	636	257	35	427	303	3,601	1,658
1987	1,938	662	356	40	457	359	3,812	1,874
1988	1,549	852	235	60	428	387	3,506	1,957
1989	1,924	747	395	58	376	445	3,945	2,020
1990	1,926	579	423	48	404	446	3,826	1,900
1991	1,987	709	410	48	357	435	3,946	1,959
1992	2,188	827	417	64	378	434	4,308	2,120
1993	1,871	908	456	66	563	454	4,318	2,447
1994	2,517	952	459	81	588	460	5,057	2,540
1995	2,177	887	457	88	496	487	4,591	2,415
1996	2,380	1,003	412	102	486	474	4,857	2,477
1997	2,689	1,194	717	110	551	545	5,806	3,117
1998	2,741	1,150	735	112	557	577	5,872	3,131
1999	2,654	1,257	779	107	525	527	5,875	3,221
2000	2,758	1,433	1,021	129	566	525	6,432	3,674
2001	2,891	1,598	1,102	130	566	506	6,793	3,902
2002	2,756	1,911	1,304	165	607	500	7,243	4,487
2003	2,454	1,856	1,212	144	565	612	6,862	4,408
2004	3,124	1,874	1,433	140	639	629	7,912	4,788
2005	3,086	2,150	1,488	176	625	670	8,195	5,109

[a] Harvested in the spring of the following year.

Table 9. South American Soybean Area, Yield and, Production, 1988 to Date

	Brazil			Argentina			Paraguay		
	Area	Yield	Production	Area	Yield	Production	Area	Yield	Production
Year	mil. ha.	t/ha.	mil.t	mil. ha.	t/ha.	mil. t.	mil. ha.	t/ha.	mil. t.
1988-89	12.15	1.94	23.60	4.00	1.63	6.50	0.85	1.90	1.62
1989-90	11.55	1.76	20.34	4.95	2.17	10.75	0.98	1.61	1.58
1990-91	9.75	1.62	15.75	4.75	2.42	11.50	0.89	1.46	1.30
1991-92	9.70	1.99	19.30	4.80	2.32	11.15	0.90	1.44	1.30
1992-93	10.63	2.12	22.50	4.90	2.32	11.35	0.98	1.79	1.75
1993-94	11.44	2.16	24.70	5.40	2.30	12.40	1.05	1.71	1.80
1994-95	11.68	2.22	25.90	5.70	2.19	12.50	1.10	2.00	2.20
1995-96	10.95	2.21	24.15	5.98	2.08	12.43	1.10	2.18	2.40
1996-97	11.80	2.27	26.80	6.26	1.81	11.20	1.20	2.31	2.77
1997-98	13.00	2.50	32.50	6.95	2.80	19.50	1.20	2.49	2.99
1998-99	12.90	2.43	31.30	8.17	2.45	20.00	1.20	2.54	3.05
1999-00	13.60	2.51	34.20	8.58	2.47	21.20	1.15	2.52	2.90
2000-01	13.93	2.80	39.00	10.40	2.67	27.80	1.35	2.61	3.52
2001-02	16.35	2.66	43.50	11.40	2.63	30.00	1.45	2.45	3.55
2002-03	18.45	2.82	52.00	12.60	2.82	35.50	1.55	2.90	4.50
2003-04	21.52	2.37	51.00	14.00	2.36	33.00	1.75	2.23	3.91
2004-05	22.84	2.32	53.00	14.40	2.71	39.00	2.00	1.90	3.80
2005-06	21.50	2.72	58.50	15.20	2.66	40.50	2.00	2.40	4.80

Source: USDA, FAS

Table 10. World Oilseed and Soybean Production

	Major Oilseeds			Soybeans		
Year	United States	Ex-United Stated	Total	United States	Ex-United States	Total
			million metric tons			
1977-78	56.5	93.7	150.2	47.95	23.98	71.93
1978-79	58.6	92.0	150.6	50.86	26.62	77.48
1979-80	72.4	98.1	170.5	61.72	31.79	93.51
1980-81	55.8	99.8	155.6	48.77	32.20	80.97
1981-82	64.0	105.5	169.5	54.13	31.93	86.06
1982-83	68.2	110.1	178.3	59.61	33.96	93.57
1983-84	50.4	115.1	165.5	44.52	38.64	84.16
1984-85	59.2	131.7	191.1	50.64	42.50	93.14
1985-86	65.4	130.8	196.2	57.13	39.92	97.05
1986-87	59.4	135.0	194.4	52.87	45.21	98.08
1987-88	60.6	150.0	210.6	52.75	51.06	103.81
1988-89	50.3	153.9	204.2	42.15	53.49	95.64
1989-90	59.3	153.1	212.4	52.35	55.02	107.37
1990-91	60.6	155.1	215.7	52.42	51.57	103.99
1991-92	64.3	160.0	224.3	54.07	53.31	107.38
1992-93	68.4	158.9	227.4	59.61	57.69	117.30
1993-94	59.5	168.4	227.9	50.92	66.58	117.50
1994-95	79.7	181.2	260.9	68.49	69.14	137.63
1995-96	69.1	190.6	259.7	59.24	65.72	124.96
1996-97	74.8	187.0	261.8	64.78	67.40	132.18
1997-98	83.1	203.9	287.0	73.18	84.90	158.07
1998-99	84.4	210.3	294.7	74.60	85.21	159.81
1999-00	82.3	221.1	303.4	72.22	87.68	159.90
2000-01	84.9	228.5	313.4	75.06	100.00	175.06
2001-02	89.8	235.3	325.1	78.67	106.20	184.87
2002-03	83.9	245.7	329.6	75.01	122.11	197.12
2003-04	76.6	258.3	334.9	66.78	119.98	186.76
2004-05	96.0	284.5	380.5	85.01	130.32	215.34
2005-06	96.4	292.5	389	84.00	139.02	223.02

[1]WASDE January 2006 and earlier.

Table 11. Soybean Balance Sheet -- Years Beginning September 1

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06[a]
	million bushels																
Carryin	182	239	329	278	292	209	335	183	132	200	348	290	248	208	178	112	256
Production	1,924	1,926	1,987	2,190	1,870	2,515	2,174	2,380	2,689	2,741	2,654	2,758	2,891	2,756	2,454	3,124	3,086
TOTAL[b]	2,109	2,167	2,320	2,470	2,168	2,729	2,514	2,573	2,826	2,944	3,006	3,052	3,141	2,969	2,638	3,242	3,346
Crush	1,146	1,187	1,254	1,279	1,276	1,405	1,369	1,436	1,597	1,590	1,578	1,640	1,700	1,615	1,530	1,696	1,730
Export	623	557	684	770	589	838	851	882	870	805	975	996	1,064	1,045	887	1,103	930
Seed, feed, residual	101	94	103	129	94	151	111	123	159	201	163	169	169	131	109	187	160
TOTAL	1,870	1,838	2,041	2,178	1,954	2,394	2,331	2,441	2,626	2,596	2,716	2,804	2,933	2,791	2,526	2,986	2,820
Carryout	239	329	278	292	209	335	183	132	200	348	290	248	208	178	112	256	526
U.S. Average price	$5.70	$5.75	$5.58	$5.60	$6.40	$5.48	$6.77	$7.35	$6.47	$4.93	$4.63	$4.54	$4.38	$5.53	$7.34	$5.74	$5.40

[a] Projected

[b] Includes imports

UNIVERSITY OF ILLINOIS EXTENSION

Grain Price OUTLOOK

A joint publication of the Department of Agricultural Economics, College of Agriculture, Purdue University, West Lafayette, Indiana, and the Department of Agricultural and Consumer Economics, College of Agricultural, Consumer and Environmental Sciences, University of Illinois at Urbana-Champaign.

CORN: STRONG DEMAND, FEWER ACRES

APRIL 2006 ***Darrel Good*** **2006 – No. 3**

Summary

Demand for U.S. corn is accelerating and consumption during the current marketing year may reach 11 billion bushels, 335 million more than consumed last year. Still, March 1, 2006 stocks were at an 18 year high and year ending stocks will be large, at about 2.24 billion bushels. The trend towards larger consumption is expected to continue into the foreseeable future, yet U.S. producers indicated that they plan to reduce acreage in 2006. The corn and soybean markets failed to give producers the correct production signals for 2006 and are now trying to encourage producers to moderate the reduction in corn acreage.

If producers follow through with intentions to plant only 78 million acres of corn in 2006, a trend yield would likely result in a draw down in stocks of about 950 million bushels by September 1, 2007, pointing to a 2006-07 marketing year average farm price of about $2.35. Any significant shortfall in production would require that the brakes be applied to consumption, implying the need for higher prices. In early April, the level of futures prices from December 2006 through September 2007 implied a 2006-07 marketing year average farm price of about $2.70. A below trend yield for 2006 and a small crop are already reflected by the market. Corn prices will likely be quite volatile as the growing season unfolds, providing good forward pricing opportunities. If the U.S. average yield is near trend, December 2006 futures would be expected to be near $2.20 to $2.30 by harvest.

Consumption on the Rise

The USDA estimated that March 1, 2006 stocks of U.S. corn were at an 18 year high of 6.987 billion bushels. Stocks were 231 million larger than on March 1, 2005 (Table 1). The stocks estimate implies that 2.83 billion bushels of corn were consumed during the second quarter of the 2005-06 marketing year. That exceeds last years record by 135 million bushels, reflecting an increase in both domestic processing uses and exports of corn. The increase in domestic processing use is being driven by increased ethanol production. Use for all processing purposes during the second quarter is estimated at 715 million bushels, 78 million more than used during the second quarter last year. Use during the first half of the year is estimated at 1.406 billion bushels, 125 million more than during the same period last year. For the year, the USDA projects use at 2.985 billion bushels, a 299 million bushel year-over-year increase. Expanding mandates for ethanol production are running ahead of the market so that the limited supply of ethanol has pushed prices to high levels. High prices should stimulate the use of existing facilities at full capacity and fuel the addition of new facilities.

Feed and residual use of corn during the second quarter of the marketing year is estimated at 1.63 billion bushels, similar to the level of use a year earlier. Use during the first half of the year is estimated at 3.871 billion bushels. Calculated used during the last half of the 2004-05 marketing

year was surprisingly large at 2.369 billion bushels, resulting in a large estimate of feed and residual use of corn for the year, at 6.162 billion bushels. The large estimate of corn fed per grain consuming animal unit (68.3 bushels) suggests that the size of the 2004 corn crop was over estimated, resulting in an over estimate of feed and residual use during the 2004-05 marketing year. Feed and residual use during the last half of the 2004-05 marketing year accounted for 28.95 percent of the total for the year, compared to the average of 36 percent in the previous 4 years (in a range of 35.5 to 36.3 percent). If use follows a "typical" seasonal pattern this year, use during the first half points to a total for the year of 6.05 billion bushels. The recent sharp increase in the number of cattle placed in feedlots may push the total even higher. We are using a forecast of 6.06 billion bushels (Table 2).

Corn exports totaled a modest 481 million bushels during the first quarter of the marketing year, down from 499 million during the previous year. Last year, exports slowed as the year progressed. This year, exports are accelerating, totaling 485 million during the second quarter, 45 million more than during the same quarter last year. The export pace remained brisk through March with USDA estimates indicating that March 2006 exports were 43 million bushels larger than March 2005 exports. Demand for U.S. corn has been stimulated by a shortfall in Argentine production and by reduced competition from Chinese exports. In its April report of world production, the USDA estimated the current Argentine corn crop at 550 million bushels, about 255 million bushels less than the 2005 harvest. Argentine exports this year are expected to be 235 million less than during the previous marketing year. Chinese corn exports this year are expected to be 100 million less than last year.

As of March 30, U.S. exporters had sold 370 million bushels of corn that had not yet been shipped. Unshipped sales a year ago were at 290 million bushels. Compared to last year, the large increase in unshipped sales are to South Korea, reflecting reduced Chinese competition, and to unknown destinations. The large level of export sales since the second week of January will likely continue due to reduced competition from Argentina and China. The USDA now projects exports for the current marketing year at 1.95 billion bushels.

Consumption of U.S. corn during the 2005-06 marketing year is now expected to reach 10.995 billion bushels, resulting in only a modest increase in stocks. Stocks at the end of the year (August 31, 2006) are now projected at 2.241 billion bushels. Year ending stocks will be large, representing 20.4 percent of consumption during the year. That percentage, however, is only slightly higher than last year's 19.8 percent and only modestly higher than the average of 18.9 percent experienced from 1998-99 through 2000-01 (Table 2). Stocks are ample, but not burdensome.

2006 Crop Prospects

With ample old crop supplies of corn, market focus will now shift almost entirely to prospects for the 2006-07 marketing year. The first issue there is the prospective size of the 2006 U.S. crop. Those prospects depend on the magnitude of planted acreage and on yield prospects. The first look at potential planted acreage of corn in 2006 was provided by the USDA's *Prospective Plantings* report. That report indicated that producers plan to plant only 78.019 million acres of corn in 2006 (Table 3). Those intentions are 3.74 million less than planted acreage in 2005 and represent the smallest acreage since 2001. Producers in almost every major corn producing state reported intentions to reduce corn acreage in 2006, led by a 700,000 acre (6 percent) reduction in Illinois. The two exceptions to planned cuts in acreage were intentions in Minnesota to plant the same number of acres as last year and intentions in North Dakota to increase acreage by 240,000 (17 percent). The indicated reductions in corn planting primarily reflect intention to increase soybean planting by 4.753 million acres,.

The planned switch from corn to soybean production in 2006 is larger than the market

anticipated and probably larger than is needed given the current surplus of soybeans. The market apparently erred by giving producers too much incentive to plant soybeans. The ratio of soybean-to-corn prices remained too high given the sharp increase in costs of producing corn. Prices began to adjust immediately after the report, with November soybean futures declining by $.2675 and December corn futures increasing by $.145 per bushel from March 31 through April 7. For a farm with average yields of 45 bushels of soybeans and 160 bushels of corn, that price change increase the relatively returns of corn production to soybean production by about $35 per acre. To the extent that the market wants to encourage producers to moderate their plans to switch acreage from corn to soybeans, additional price adjustment may be required very quickly.

In addition to price changes, producers' planting decisions will be influenced by the cost and availability of inputs (seed and fertilizer) and by spring weather patterns. The history of corn acreage since 1996 (first year of complete planting flexibility) indicates that corn producers have on occasion made significant adjustments from intentions. Planted acreage deviated from March intentions by 1.5 million acres or more in 1997, 2000, and 2004. The largest increase from March intentions during that period was the 1.925 million acres in 2004 (Table 3). The USDA will survey producers again in June and release an estimate of planted acreage on June 30, 2006. At this juncture it is difficult to forecast the direction and magnitude of change, if any, from intentions. Even with price incentives, the change may be small. With a favorable planting season, an increase from intentions to a total of 79 million acres might be expected.

Over the past 10 seasons, the difference between planted acreage of corn for all purposes and acreage harvested for grain has varied from 6.585 million to 9.564 million (Table 3). The difference was less than 7 million acres in 5 of the 10 years, including 2005. The average for the 10 years was 7.315 million. Excluding 2002, the average was 7.066 million. If 79 million acres of corn are planted in 2006, a typical growing season might result in acreage harvested for grain of about 71.9 million.

Yield prospects for 2006 are obviously difficult to anticipate at this time. U.S. average yields have generally shown less deviation from trend value over the past 10 years than the previous 20 years. Average yields have been near trend value since 1996, with the exception of the below-trend value in 2002 and the above trend value in 2004 (Table 4). For 2006, the trend value for the U.S. average yield is near 149 bushels per acre. At this juncture, two weather factors seem significant. One is the generally ample rainfall in March and early April that is increasing sub-soil moisture to capacity in some areas and the gradual re-building of soil moisture in some drought areas. Extremes still exist, however, with flooding in some areas and persistent dryness in others, but the overall development is favorable. The other factor is the development of a LaNina weather event which some believe may increase the risk of dry weather in the midwest during the corn growing season. The market will closely monitor spring rainfall, planting progress, and climate developments to assess yield potential. A trend yield of 149 bushels and harvested acreage of 71.9 million, point to a 2006 crop of 10.7 billion bushels.

The critical question about potential crop size is if production will be large enough to accommodate the anticipated increase in consumption of U.S. corn during the 2006-07 marketing year, or if the brakes will need to be applied to the consumption train. Domestic corn consumption is expected to continue to expand rapidly, if supplies are available, driven largely by expanding ethanol production. Another 300 million bushel increase in corn used for ethanol in 2006-07 would push total food, seed, and residual use to 3.3 billion bushels. There is potential for even larger increases, with some suggesting total use near 3.5 billion bushels. Feed and residual use of corn might grow modestly due to expanding livestock numbers. Expansion in broiler production, however, might be limited by growing inventories of poultry in storage and sharp declines in poultry prices. In addition, by-product feed from ethanol production will compete with the feeding of corn

grain. Feed and residual use of corn during the 2006-07 marketing year might see only a marginal increase to about 6.1 billion bushels.

U.S. corn export prospects during the 2006-07 marketing year are bolstered by the smaller 2006 Argentine corn harvest and by indications that China will continue to provide less competition in the export market. Exports could grow from 1.95 billion this year to 2.15 billion in 2006-07. With ample supplies, consumption of U.S. corn during the 2006-07 marketing year could jump to 11.55 billion bushels. Assuming that carryover stocks near 1.2 billion bushels represent the minimum comfort level, the 2006 crop needs to be at least 10.5 billion bushels to accommodate expected consumption. With harvested acreage of 71.9 million, a crop of that size would require a U.S. average yield of 146 bushels. A yield of less than 143.2 bushels could pull year ending stocks below one billion bushels, while a yield below 140.5 bushels would require consumption to be less than 11.55 billion bushels. That is, an average yield of 6 percent or more below trend value would require some curtailment of consumption from the sharp increase now expected. Recognizing the potential for regional dryness during portions of the 2006 growing season, an average yield of 148 bushels is used in our current balance sheet projections (Table 2). That yield would produce a crop of 10.64 billion bushels, result in year ending stocks of 1.34 billion bushels, and an ending stocks-to-use ratio of 11.6 percent.

Price Prospects

The USDA has reported the average price received by corn producers from September 2005 through February 2006 and the mid-month price for March 2006. Using the average percent of the crop marketed in each of those 7 months over the past 5 years, the weighted average farm price of corn to date for the 2006-06 marketing year is $1.91 per bushel. The mid-point of the USDA's forecast range fro the average price for the year is $2.00, implying that the average price during the last 5 months of the year would be $2.20 per bushel. The futures settlement prices on April 7, 2006 implied an average cash price for the last 5 months of the year near $2.45 per bushel and an average fo the entire year of $2.07. The USDA's midpoint forecast of $2.00 is about $.10 above the average price forecast by the historic relationship between the marketing year average price and the year ending stocks-to-use ratio.

The average central Illinois cash bid of corn during the current marketing year has ranged from a low of $1.635 (October 18, 2005) to a high of $2.23 (April 7, 2006). The range from high to low of $.595 is within the historic range for an entire marketing year, but in the lower part of that range. A more typical range is near $.70. The April high is also unusual, with a high registered in April only one other time in the past 32 years (2004). This simplistic analysis would suggest that a new high in cash corn prices might be expected yet this marketing year, most likely in June or July. The futures market already offers substantially higher prices for delivery later this spring and summer. Even with a continuation of a weak basis, the market is offering about $2.40 for May/June delivery of corn in central Illinois, compared to the current spot bid near $2.23.

The tentative supply and consumption balance sheet developed here for the 2006-07 marketing year projects to an ending stocks-to-use ratio for the 2006-07 marketing year of 11.6 percent. Based on the historic relationship between average price and the ending stocks-to-use ratio, that ratio points to a 2006-07 marketing year average price of about $2.35 per bushel. Futures settlement prices on April 7, 2006 implied a 2006-07 marketing year average farm cash price of corn of $2.70 per bushel. That price implies that the market is currently trading a 2006 crop of about 10.2 billion bushels, or an average yield of 142 bushels per acre.

December 2006 corn futures moved to a new contract high of $2.75 following the USDA's *Prospective Plantings* report. With strong demand prospects and significant production uncertainty, prices will likely remain very volatile over the next 5 months. December futures have a history of trading to at least $2.75 (3 exceptions in the past

35 years). Highs over the past ten years have ranged from $2.69 (2003) to $3.89 (1996). The high was over $3.00 in 3 of those 10 years. The expected volatility will give producers an opportunity to price 2006 crop well above the guaranteed price of $2.59 (December futures) offered by revenue insurance products. If the 2006 average yield is at trend value or above, prices will be substantially lower by late summer due to the added pressure of large old crop supplies. December futures below $2.30 and a weak basis would be anticipated under that scenario.

Issued by Darrel Good
Extension Economist
University of Illinois

Table 1 Corn Quarterly Balance Sheet

	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
										million bushels													
September 1 stocks	3,523	1,006	1,648	4,040	4,882	4,259	1,930	1,344	1,521	1,100	2,113	850	1,558	426	883	1,308	1,787	1,718	1,899	1,596	1,087	958	2,114
Production	4,174	7,672	8,875	8,226	7,131	4,929	7,532	7,934	7,475	9,477	6,338	10,051	7,400	9,233	9,207	9,759	9,431	9,915	9,503	8,968	10,089	11,807	11,112
TOTAL[a]	7,699	8,680	10,534	12,267	12,016	9,191	9,464	9,282	9,016	10,584	8,472	10,910	8,974	9,672	10,099	11,085	11,232	11,640	11,412	10,578	11,190	12,776	13,236
September-November																							
Seed, food, ind.	227	244	276	295	296	302	312	338	361	370	383	410	417	388	435	450	459	466	492	549	588	643	691
Export	493	503	415	318	396	471	582	383	421	488	435	449	660	487	380	450	535	507	448	393	470	499	481
Feed, residual	1,326	1,301	1,219	1,348	1,551	1,344	1,487	1,619	1,673	1,814	1,701	1,963	1,778	1,885	2,030	2,118	2,188	2,131	2,200	1,986	2,166	2,175	2,241
TOTAL	2,046	2,048	1,910	1,961	2,243	2,117	2,381	2,339	2,455	2,672	2,519	2,822	2,856	2,759	2,845	3,018	3,182	3,104	3,140	2,928	3,224	3,317	3,413
December 1 stocks	5,652	6,631	8,615	10,305	9,771	7,072	7,082	6,940	6,547	7,906	5,937	8,080	6,106	6,903	7,247	8,052	8,039	8,530	8,265	7,638	7,954	9,452	9,815
Seed, food, ind	212	236	262	281	288	301	313	330	362	365	379	410	405	400	425	434	447	465	482	563	609	637	715
Export	506	580	460	313	405	502	682	471	362	463	330	590	562	525	380	465	465	415	448	390	506	440	485
Feed, residual	1,069	1,192	1,306	1,463	1,444	1,065	1,276	1,351	1,267	1,401	1,240	1,492	1,344	1,486	1,503	1,460	1,529	1,607	1,540	1,557	1,571	1,618	1,630
TOTAL	1,787	2,008	2,028	2,057	2,137	1,868	2,271	2,152	1,991	2,229	1,949	2,493	2,311	2,411	2,308	2,359	2,441	2,488	2,471	2,510	2,686	2,695	2,830
March 1 stocks	3,865	4,623	6,587	8,248	7,636	5,204	4,812	4,789	4,561	5,678	3,996	5,592	3,800	4,494	4,940	5,698	5,602	6,043	5,795	5,132	5,271	6,756	6,987
Seed, food, ind	253	294	307	333	337	353	376	384	414	414	423	452	433	471	470	495	512	514	539	617	676	700	
Export	513	475	201	496	510	592	601	454	371	411	270	568	610	433	350	497	451	455	497	393	465	427	
Feed, residual	954	1,019	1,091	1,088	951	841	993	960	1,042	1,146	950	1,159	1,044	1,097	1,084	1,097	1,058	1,153	1,166	1,141	1,166	1,312	
TOTAL	1,720	1,788	1,599	1,917	1,798	1,786	1,970	1,798	1,828	1,971	1,642	2,180	2,087	2,001	1,904	2,089	2,022	2,122	2,203	2,151	2,307	2,439	
June 1 stocks	2,145	2,838	4,990	6,332	5,839	3,419	2,843	2,992	2,739	3,709	2,360	3,415	1,718	2,497	3,040	3,616	3,586	3,924	3,597	2,985	2,970	4,321	
Seed, food, ind	238	293	307	324	331	341	369	374	396	407	429	442	373	460	475	467	496	512	532	611	664	706	
Export	374	292	151	365	406	463	503	419	430	301	293	570	396	353	394	572	485	564	512	411	459	448	
Feed, residual	527	603	499	761	843	685	627	679	816	891	789	846	527	809	865	792	890	951	958	879	892	1,057	
TOTAL	1,139	1,188	957	1,450	1,580	1,489	1,499	1,472	1,642	1,599	1,511	1,858	1,295	1,617	1,734	1,831	1,871	2,027	2,002	1,900	2,015	2,211	
September 1 stocks	1,006	1,648	4,040	4,882	4,259	1,930	1,344	1,521	1,100	2,113	850	1,558	426	883	1,308	1,787	1,718	1,899	1,596	1,087	958	2,114	
Annual																							
Seed, food, ind.	930	1,067	1,152	1,233	1,251	1,298	1,370	1,425	1,533	1,556	1,613	1,715	1,628	1,714	1,805	1,846	1,913	1,957	2,046	2,340	2,537	2,686	
Export	1,887	1,850	1,227	1,492	1,716	2,029	2,367	1,727	1,584	1,663	1,328	2,177	2,228	1,797	1,504	1,989	1,937	1,941	1,905	1,588	1,900	1,814	
Feed, residual	3,876	4,115	4,114	4,660	4,789	3,934	4,382	4,609	4,798	5,252	4,680	5,460	4,693	5,277	5,482	5,468	5,665	5,842	5,864	5,563	5,795	6,162	
TOTAL	6,693	7,032	8,494	7,385	7,757	7,260	8,120	7,761	7,916	8,471	7,822	9,352	8,548	8,789	8,791	9,298	9,515	9,741	9,815	9,491	10,232	10,662	

[a] Includes imports for t

Table 2. Corn Annual Balance Sheet

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06[a]	2006-07
						million bushels												
Carryin	1,930	1,344	1,521	1,100	2,113	850	1,558	426	883	1,308	1,787	1,718	1,899	1,596	1,087	958	2,114	2,241
Production	7,532	7,934	7,475	9,477	6,338	10,051	7,400	9,233	9,207	9,759	9,431	9,915	9,503	8,968	10,089	11,807	11,112	10,640
TOTAL[b]	9,464	9,282	9,016	10,584	8,472	10,910	8,974	9,672	10,099	11,085	11,232	11,659	11,412	10,578	11,190	12,776	13,236	12,891
Seed, food, industrial	1,370	1,425	1,533	1,556	1,613	1,715	1,628	1,714	1,805	1,846	1,913	1,957	2,046	2,340	2,537	2,686	2,985	3,300
Export	2,367	1,727	1,584	1,663	1,328	2,177	2,228	1,797	1,504	1,981	1,937	1,935	1,905	1,588	1,897	1,814	1,950	2,150
Feed and residual	4,382	4,609	4,798	5,252	4,680	5,460	4,693	5,277	5,482	5,471	5,664	5,848	5,864	5,563	5,798	6,162	6,060	6,100
TOTAL	8,120	7,761	7,915	8,471	7,621	9,352	8,548	8,789	8,791	9,298	9,515	9,741	9,815	9,491	10,232	10,662	10,995	11,550
Carryout	1,344	1,521	1,100	2,113	850	1,558	426	883	1,308	1,787	1,718	1,899	1,596	1,087	958	2,114	2,241	1,341
U.S. average price	$2.36	$2.28	$2.37	$2.07	$2.50	$2.26	$3.24	$2.71	$2.45	$1.94	$1.82	$1.85	$1.97	$2.32	$2.42	$2.06	$1.95	$2.35

[a] Projected

[b] Includes imports

Table 3. United States Corn Planting Intentions, Actual Plantings, and Acres Harvested

Year	Planted Acreage				Harvested Acreage
	February/January Intentions	March Intentions	June Intentions	Actual	
			thousand acres		
1976	80,822	82,727	84,092	84,588	71,506
1977	84,526	83,923	82,735	84,328	71,614
1978	80,944	80,237	78,717	81,675	71,930
1979	80,676	79,209	79,751	81,394	72,400
1980	83,131	82,022	83,478	84,043	72,961
1981	...	83,977	84,677	84,097	74,524
1982	...	84,735	82,129	81,857	72,719
1983	69,569[a]	58,812	60,129	60,217	51,479
1984	...	81,766	79,940	80,617	71,897
1985	...	82,021	83,217	83,398	75,209
1986	...	78,066	76,646	76,580	68,907
1987	...	67,556	66,024	66,200	59,505
1988	...	66,926	67,519	67,717	58,250
1989	...	73,253	72,790	72,322	64,783
1990	...	74,804	74,574	74,166	66,952
1991	77,500	76,124	75,909	75,957	68,822
1992		79,007	79,335	79,311	72,077
1993		76,486	74,259	73,239	62,933
1994		78,625	78,767	78,921	72,514
1995		75,323	72,800	71,479	65,210
1996		79,920	80,355	79,229	72,644
1997		81,416	80,227	79,537	72,671
1998		80,781	80,798	80,165	72,589
1999		78,219	77,611	77,386	70,487
2000		77,881	79,579	79,551	72,440
2001		76,693	76,109	75,702	68,768
2002		79,047	78,847	78,894	69,330
2003		79,022	79,066	78,603	70,944
2004		79,004	80,968	80,929	73,631
2005		81,413	81,592	81,759	75,107
2006		78,019			

[a] February

Table 4. United States Corn Yield Estimates

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
	bushels per acre																														
July 1	93.0	90.5	89.4	90.1	95.8	99.3	95.9	...	...	...	...	...	...	87.0																	
August 1	87.4	86.7	87.3	96.1	102.1	93.0	104.3	113.9	99.9	107.9	110.6	120.4	121.4	78.5	112.8	117.7	107.8	121.3	116.0	128.4	125.6	118.7	125.3	130.0	134.7	141.9	133.9	125.2	139.9	148.9	139.2
September 1	85.1	82.8	89.7	100.3	104.6	91.8	107.1	113.9	85.1	106.3	113.3	119.7	119.9	78.5	112.4	121.7	106.1	121.4	113.1	129.0	121.1	120.2	125.2	132.0	132.2	141.8	133.5	125.4	138.5	149.4	143.2
October 1	86.2	82.7	90.8	100.7	106.4	90.8	109.0	114.2	82.9	105.5	115.1	119.2	119.9	80.2	114.4	120.3	108.8	123.8	110.3	133.8	116.6	123.0	125.8	132.0	133.5	139.6	136.3	127.2	142.2	158.4	146.1
Novembar 1	87.2	85.5	91.5	101.2	109.2	90.8	109.2	114.2	80.5	105.9	116.6	119.3	120.3	82.3	116.6	119.0	108.6	129.3	103.1	138.4	113.7	126.5	126.4	133.3	134.5	137.7	138.0	127.6	143.2	160.2	148.4
January 1	86.2	87.4	90.8	101.2	109.4	91.0	109.9	114.8	81.6	106.6	118.0	119.3	119.4	84.6	116.2	118.5	108.6	131.4	100.7	138.6	113.5	127.1	127.0	134.4	133.8	137.1	138.2	130.0	142.2	160.4	147.9
FINAL	86.4	88.0	90.8	101.0	109.5	91.0	108.9	113.2	81.1	106.7	118.0	119.3	119.8	84.6	116.3	118.5	108.6	131.5	100.7	138.6	113.5	127.1	126.7	134.4	133.8	136.9	138.2	129.3	142.2	160.7	

Table 5. United States Corn Production Estimates

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
									million bushels																
July	7,116	...	...	...	...	...	...	5,200																	
August	7,735	8,315	5,237	7,668	8,266	8,316	7,231	4,479	7,348	7,850	7,418	8,762	7,423	9,214	8,122	8,695	9,276	9,592	9,561	10,369	9,266	8,886	10,064	10,923	10,350
September	7,940	8,319	4,390	7,552	8,469	8,268	7,141	4,462	7,321	8,118	7,295	8,770	7,229	9,257	7,832	8,804	9,268	9,738	9,381	10,362	9,238	8,849	9,944	10,961	10,639
October	8,081	8,315	4,259	7,498	8,603	8,220	7,139	4,553	7,449	8,022	7,479	8,938	6,962	9,602	7,541	9,012	9,312	9,743	9,467	10,192	9,430	8,970	10,207	11,613	10,857
November	8,097	8,330	4,121	7,527	8,717	8,223	7,166	4,671	7,590	7,935	7,479	9,329	6,503	10,010	7,374	9,265	9,359	9,836	9,537	10,054	9,546	9,003	10,278	11,741	11,032
January	8,201	8,397	4,204	7,656	8,865	8,253	7,064	4,921	7,527	7,933	7,474	9,479	6,344	10,103	7,374	9,293	9,366	9,761	9,437	9,968	9,507	9,008	10,114	11,807	11,112
FINAL	8,119	8,235	4,174	7,672	8,875	8,226	7,131	4,929	7,532	7,934	7,475	9,477	6,338	10,051	7,400	9,233	9,207	9,759	9,431	9,915	9,503	8,967	10,089	11,807	

UNIVERSITY OF ILLINOIS EXTENSION

Grain Price OUTLOOK

A joint publication of the Department of Agricultural Economics, College of Agriculture, Purdue University, West Lafayette, Indiana, and the Department of Agricultural and Consumer Economics, College of Agricultural, Consumer and Environmental Sciences, University of Illinois at Urbana-Champaign.

SOYBEANS: RECORD STOCKS, RECORD ACREAGE INTENTIONS

APRIL 2006 ***Darrel Good*** **2006 – No. 4**

Summary

U.S. stocks of soybeans on March 1, 2006 were estimated at a record 1.669 billion bushels, 287 million above the previous record of a year ago. The USDA's stocks estimate was very near the average of pre-report expectations. The USDA expects that U.S. stocks at the end of the 2005-06 marketing year will total a record 565 million bushels, 20.3 percent of projected use.

U.S. producers reported intentions to plant a record 76.895 million acres of soybeans in 2006, 4.753 million more than planted in 2005 and 1.687 million more than the previous record of 2004.

Providing some fundamental support, the USDA lowered the projected size of the current Brazilian soybean harvest by 55 million bushels (2.6 percent) and the projected size of the crop in Paraguay by 18 million bushels (11 percent). Still, the 2006 South American crop is expected to reach a record 3.83 billion bushels, 5.6 percent larger than the previous record crop of 2005.

Soybean prices traded in a fairly narrow range from late January through late March, but declined sharply after the March 31 USDA reports. The average central Illinois cash bid on April 13 stood at $5.37, only $.22 above the low of October 10, 2005, and $.685 below the marketing year high on January 4, 2006. The USDA expects the 2005-06 U.S. average farm price to be near $5.60 (in a range of $5.45 to $5.75). Next year's average could be even lower, perhaps near $5.20 if the 2006 growing season results in average yields near trend value.

Large Old Crop Supplies

The USDA's March *Grain Stocks* report placed March 1, 2006 U.S. soybean stocks at a record 1.669 billion bushels, 287 million more than in store the previous year. Ownership of March 1 stocks is not known, but the bulk of the year-to-year increase was being held in off-farm facilities. Off-farm stocks accounted for 47.7 percent of the total inventory, compared to 42.4 percent on the same date last year. The level of March 1 stocks were generally as expected.

The U.S. Census Bureau indicated that 437.1 million bushels of soybeans were crushed during the second quarter of the marketing year, about equal to the crush during the second quarter last year. For the first half of the year, the domestic crush totaled 879.4 million bushels, 15.8 million bushels (1.8 percent) more than crushed a year earlier. Historically, there has been a very consistent seasonal pattern of domestic crush that gets interrupted only when there is a short crop and/or a large seasonal price change. Over the past 10 years, 1996-97 and 2003-04 fell into that category. In those years, crush during the first half of the year accounted for 53 and 55.1 percent of the marketing year total, respectively. In the other 8 years, crush during the first half accounted for 50.9 to 52.9 percent of the total. The average as 51.8 percent. The average over the past 5 years, excluding 2003-04 was 51.4 percent. The crush pace to date is on track for reaching 1.698

to 1.711 billion bushels if the average seasonal pattern holds.

Since soybeans are being crushed to meet soybean meal demand, crush can also be projected based on expected consumption (domestic and export) of soybean meal. In it's April update of prospective supply and consumption, the USDA projected 2005-06 marketing year exports of soybean meal at 6.95 million tons, 150,000 above the March projection, but 390,000 tons (5.3 percent) below the exports of last year. Through the first 5 months of the marketing year, the Census Bureau estimated meal exports at 2.653 million tons, 10.1 percent below the total of the same 5 months last year. As of April 6, 2006, about half way through the marketing year, the USDA reported cumulative exports of 3.706 million tons, 43.7 percent below the total of a year earlier. Unshipped sales were reported at 1.246 million tons, 12.5 percent larger than outstanding sales of a year ago. Total comments of 4.952 million tons were almost identical to the total of a year ago. With South American supplies now available, the rate of U.S. exports will decline modestly over the next 6 months, although two of the largest markets for U.S. soybean meal, Canada and Mexico, will continue to import U.S. soybean meal. It appears that meal exports cold exceed the current USDA projection by a modest amount. We are using a projection of 7 million tons.

The April USDA report forecast domestic meal consumption during the current year at 33.75 million tons, 150,000 below the March forecast and only 187,000 tons (0.6 percent) above consumption of a year ago. The projected increase appears small in context of larger numbers of livestock and poultry and increased slaughter weight of cattle and hogs. The mild winter weather along with increased supplies of by-product feed from ethanol production may account for the modest projection of domestic meal consumption.

During the first six months of the marketing year, meal and hull meal production per bushel of soybeans averaged 47.17 pounds. If consumption totals 40.75 million tons, that yield level would point to a marketing year total crush of 1.724 billion bushels, allowing for imports of 165,000 tons of meal and a return to a normal level of year ending stocks of 250,000 tons (Table 2). That projection is slightly higher than the projection based solely on seasonal analysis and very close to the current USDA projection of 1.72 billion bushels.

The average oil yield from the 2005 crop has been record large, averaging 11.6 pounds per bushel during the first six months of the 2005-06 marketing year. If that yield is maintained though the rest of the year, a crush of 1.724 billion bushels will produce a total of 20 billion pounds of soybean oil (Table 3). The USDA projects U.S. soybean oil exports during the current marketing year at 1.125 billion pounds, 199 million (15 percent) less than exported last year. Through the first 5 months of the marketing year, the Census Bureau reported soybean oil exports of 476 million pounds, 299 million (38.6 percent) less than during the same 5 months last year. Through the first 6 months, the USDA reported commercial exports of 425 million pounds, 37.4 percent less than shipments of a year ago. Outstanding sales stood at 137 million pounds on April 6, 2006, compared to 116.6 million pounds last year. As of April 6, then, commercial exports plus unshipped sales were 29 percent smaller than total commitments of a year ago. It appears that the USDA forecast of 1.115 billion pounds for the year may be a little too high. We are using a forecast of 1.1 billion.

The USDA projects domestic use of soybean oil during the current marketing year at 18 billion pounds, 3.2 percent more than consumed last year. That rate of increase is above the long term average of 2 percent, but is consistent with the estimate of use to date. If soybean oil consumption reaches 19.1 billion pounds this year, stocks at the end of the year are expected to total 2.664 billion pounds, second in size only to stocks at the end of the 2000-01 marketing year when soybean oil prices were at a 30 year low of $.142 per pound.

U.S. soybean exports during the second quarter of the marketing year are estimated at 306.2 million

bushels, down sharply from shipments of a year ago. That pace continues the slow start in the first quarter, with shipments during the first half of the year at a 6-year low of 622 million bushels, 23 percent below last year's total. The export pace remained a little slow in March and the first week of April with total shipments for the 5 weeks ended April 6 totaling 100.1 million bushels, down from 107.4 million during the same period last year. As of April 6, cumulative shipments totaled 724 million bushels, 185 million (20.6 percent) less than the total of a year ago. Reduced demand for U.S. soybeans has been broad based. Among the major buyers, only Mexico has imported more U.S. soybeans that at this time last year.

As of April 6, the USDA indicated that 71.4 million bushels of U.S. soybeans had been sold for export but not yet shipped. The total last year was 97 million bushels. The low level of sales along with the harvest of a record large South American crop is expected to keep pressure on U.S. exports.

The USDA now estimates the size of the 2006 South American crop at 3.83 billion bushels. That is 73 million less than the March forecast, but 200 million larger than the record crop of last year (Table 4). The largest increase, 150 million bushels, is expected in Brazil. The Argentine crop is expected to be 50 million bushels larger and combined production in Paraguay, Bolivia, and Uruguay is forecast at 240 million bushels, about the same as last year.

The USDA's April report confirmed its forecast of marketing year soybean exports of 900 million bushels. This is the first report since November 2005 that the forecast was not lowered. That projection is 203 million, 18.4 percent, below the record exports of a year ago. With current export commitments trailing last year's pace by 21 percent, the forecast of 900 million still appears a bit optimistic. We are using a projection of 890 million bushels (Table 5).

Based on the projections of use developed here, year ending stocks of U.S. soybeans will total a record 567 million bushels, or 20.4 percent of expected consumption. That ratio of stocks-to-use would be the third largest ever, exceeded only in 1985-86 (28.6 percent) and 1986-87 (21.4 percent). The USDA projects world stocks of soybeans at a record 1.975 billion bushels, or 25.1 percent of projected consumption.

New Crop Prospects

In it's March 31 *Prospective Plantings* report, the USDA reported U.S. producer intentions to plant 76.895 million acres of soybeans in 2006 (Table 8). While an increase in intentions was expected, the magnitude of the planned increase exceeded market expectations by at least two million acres. The intended acreage is 4.753 million more than planted in 2005 and 1.687 million above the record acreage of 2004. The planned increase is thought to be driven by sharply higher costs of producing corn, since intended acreage for corn is 3.74 million less than planted in 2005. The markets for corn and soybeans failed to compensate for the cost difference, making soybean production potentially more profitable than corn production.

The planned increase in soybean acreage is generally widespread geographically (Table 9). The western corn belt states intend to plant an additional 2.8 million acres of soybeans in 2006, led by a 1.2 million acre increase in North Dakota. Intentions are up 300,000 acres in each of Iowa, Kansas, Minnesota, Missouri, and Nebraska. Producers in the eastern corn belt intend to increase acreage by 1.44 million acres, led by an increase of 600,000 in Illinois and 500,000 in Indiana. The 12 states included in the midwest in Table 9 account for 82.8 percent of the intended acreage in 2006, slightly higher than the 82.4 percent last year. The one region that intends to decrease soybean acreage is the southeast, where intentions total 2.188 million acres, 71,000 less than planted last year.

Since the *Prospective Plantings* report was released, corn prices have moved higher and soybean prices lower in order to encourage producers to moderate their planned switch from corn to soybeans in 2006. Since 1996, when farm programs allowed planting flexibility, planted acreage of soybeans has differed from March intentions by more than a million acres 4 times

(1996, 1997, 2001, and 2005). The largest positive difference was 1.7 million acres in 1996 while the largest negative difference was 2.582 million in 2001. In addition to relative prices, the cost and availability of inputs (seed and fertilizer) and spring weather conditions will influence producer planting decisions. Actual planted acreage may be closer to 75.4 million. The USDA will survey producers again in June and report planted acreage on June 30.

Over the past 10 years, the difference between planted and harvested acreage of soybeans has varied from 781,000 (2005) to 1.858 million (2000). The average difference was 1.2 million acres. If 75.4 million acres are planted in 2006, harvested acreage may be near 74.2 million, 2.84 million more than harvested in 2005 and 240,000 more than the record of 2004.

The U.S. average soybean yield was record large in 2004 (42.2 bushels) and again in 2005 (43.3) bushels. Those large yields followed a 9-year period when the average yield was in a basic sideways pattern between 33.9 and 39.6 bushels (Table 10). The average yield for 2006 is difficult to anticipate because yields will be influenced significantly by late summer weather and the occurrence or lack of occurrence of insect and disease problems. The potential for soybean rust in the midwest is the most difficult factor to anticipate. Yield prospects could change dramatically as the growing season unfolds. For now, we are using an expectation of 42.5 bushels, but with a low level of certainty. Our early season expectation, then, is for a 2006 soybean crop of about 3.155 billion bushels, slightly above the record crop of 3.124 billion of 2004 (Table 11). If acreage is near intentions and abandoned acreage is less than a million acres, about 76 million acres of soybeans could be harvested in 2006. A favorable growing season and a yield near 44 bushels per acre would produce a crop of 3.344 billion bushels. The downside on production prospects is presumably large as well. A yield near that of 2003, could produce a crop as small as 2.58 billion bushels. For the most part, however, a U.S. average yield below 36 bushels and a crop less than 2.7 billion would be a major surprise.

Stocks to Increase Again?

If production of soybeans in 2006 is near 3.155 billion bushels, the available supply for the 2006-07 marketing year will exceed 3.7 billion bushels (Table 5). Consumption of U.S. soybeans should expand modestly during the year ahead. The domestic crush will be supported by a modest growth in livestock numbers and consumption of soybean meal. Soybean and soybean meal exports may be supported by reduced soybean production in Brazil in 2007. A domestic crush of 1.76 billion bushels is anticipated. Similarly, U.S. soybean exports will be supported by growing Chinese demand and a potential reduction in Brazilian soybean production due to unfavorable economic conditions. A rebound to exports of 1.1 billion bushels is projected here. Even with optimistic consumption forecasts, the year ending inventory of U.S. soybeans could increase to near 700 million bushels next year. At that level, the stocks-to-use ratio would grow to about 23 percent, up from the 20.4 percent projected for this year.

The 2006 crop will have to be less than 3.026 billion bushels to result in a draw down in inventory and less than 2.7 billion bushels to reduce year ending stocks to a more typical level of 250 million bushels. There seems to be substantial cushion before a shortage of soybeans develops in the near future.

Price Prospects

The USDA has estimated the U.S. average monthly price received by producers for September 2005 through February 2006 and the midmonth price for March. Based on those estimates and assuming that the 2005 soybean crop has been marketed in the same pattern as the average of the previous 5 years, the weighted average price received by U.S. producers during the first 7 months of the 2005-06 marketing year was about $5.70, with 78 percent of the crop priced. For the year, the USDA expects the average price to be between $5.45 and $5.75. To equal the mid-point of that range, the average price during the last 5 moths of the crop year (22 percent of the crop to be priced) would have to be

about $5.20. At the close of trade on April 13, 2006, the futures market was offering an average for those 5 months of about $5.70, resulting in a marketing year average price of $5.70. The USDA projection of average price and the marketing year average projected by the market are both above the $5.35 average that might be reasonably expected by the large level of surplus stocks.

The average central Illinois cash soybean bid reached a marketing year low of $5.15 on October 10, 2005 and a high of $6.055 On January 4, 2006. The range of $.905 is low by historic standards, suggesting a new high or low before August 31, 2006. The average central Illinois bid stood at $5.37 on April 13, only $.22 above the harvest low. Favorable growing conditions would likely pressure prices to a new marketing year low.

The projections of production and use developed here for the 2006-07 marketing year project to a 2006-07 average farm price of about $5.20 per bushel, with some chance of much lower prices if speculative demand cools. At the close of trade on April 13, the futures market reflected an average 2006-07 marketing year farm price near $5.90. Again, without significant crop concerns, there appears to be significant downside risk for new crop prices. November 2006 soybean futures have a contract high of $6.60, reached in July 2005, and a low of $5.42 established in February 2005. That contract is currently trading near $5.95. Values above $6.00 still appear to be attractive for forward pricing a portion of the 2006 crop.

Issued by Darrel Good
Extension Economist
University of Illinois

Table 1. Soybean Quarterly Balance Sheet

	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
												million bushels												
September 1 stocks	254.5	344.6	175.7	316.1	536.4	436.4	302.5	182.0	239.1	329.0	278.4	292.3	209.1	334.8	183.5	131.8	199.8	348.5	290.2	247.7	208.0	178.3	112.4	255.7
Production	2,190.3	1,635.8	1,860.9	2,099.1	1,942.6	1,937.7	1,548.8	1,923.8	1,925.9	1,986.6	2,190.4	1,869.7	2,514.9	2,174.3	2,380.3	2,688.8	2,741.0	2,653.8	2,757.8	2,890.7	2,756.1	2,453.7	3,123.7	3,086.4
TOTAL	2,444.8	1,980.4	2,036.6	2,415.2	2,479.0	2,374.1	1,855.3	2,108.8	2,167.0	2,319.6	2,470.8	2,167.0	2,730.0	2,514.1	2,572.8	2,825.6	2,943.8	3,006.3	3,052.0	3,141.3	2,968.8	2,637.6	3,241.7	3,346.1
September-November																								
Crush	284.2	269.6	253.7	267.5	295.8	293.4	275.4	273.0	304.1	322.0	328.2	329.6	346.2	351.4	360.6	395.8	409.3	426.7	420.9	427.5	417.5	419.4	427.4	442.3
Export	245.9	190.6	153.4	166.5	216.5	260.8	138.3	168.5	120.1	167.1	235.9	176.0	230.9	233.6	289.7	365.3	268.5	297.8	315.5	348.6	320.4	385.7	405.8	315.6
Seed, residual	-36.2	48.5	14.8	21.5	10.1	64.6	74.8	56.6	58.8	51.5	70.7	79.8	50.9	95.7	97.4	66.9	78.5	98.9	75.6	89.6	112.3	140.5	99.3	82.8
TOTAL	493.9	508.7	421.9	455.4	522.4	618.8	488.5	498.1	483.0	540.6	634.8	585.4	628.0	681.7	747.7	826.2	758.8	823.4	812.0	865.7	850.2	945.6	932.4	840.7
December 1 stocks	1,950.9	1,471.7	1,614.7	1,959.8	1,956.6	1,755.3	1,366.8	1,610.7	1,684.0	1,779.0	1,836.0	1,573.6	2,102.0	1,833.4	1,825.1	1,999.4	2,186.4	2,182.7	2,240.0	2,275.6	2,115.4	1,688.7	2,304.6	2,502.1
Crush	314.9	262.5	276.4	281.9	320.1	317.3	286.3	304.3	301.4	323.1	335.2	327.2	371.8	359.0	400.7	443.1	408.6	408.1	417.9	447.6	422.0	423.2	436.2	437.1
Export	263.6	234.6	230.2	270.9	233.7	258.9	197.0	217.0	179.7	259.6	255.9	212.7	283.5	278.7	333.1	306.4	243.1	315.4	338.4	422.7	425.5	335.1	400.2	306.2
Seed, residual	26.6	18.8	47.0	35.7	63.8	33.0	-6.7	33.9	12.8	19.6	29.3	12.1	76.5	5.3	35.5	46.9	77.0	63.2	79.8	69.3	66.9	25.9	88.3	91.2
TOTAL	605.1	515.9	553.6	588.5	617.6	609.2	476.6	555.2	493.9	602.3	620.4	552.0	731.8	643.0	769.3	796.5	728.7	786.7	836.1	939.6	914.4	784.2	924.7	839.5
March 1 stocks	1,345.8	955.8	1,061.1	1,371.3	1,339.0	1,146.1	890.2	1,055.5	1,190.1	1,177.3	1,215.6	1,021.6	1,370.2	1,190.4	1,055.8	1,202.9	1,457.3	1,396.0	1,403.9	1,336.0	1,202.0	905.8	1,381.4	1,668.6
Crush	260.1	240.0	258.2	262.3	297.2	308.3	270.1	290.7	295.5	304.0	325.4	320.4	361.7	334.0	355.7	404.9	396.4	373.9	405.4	429.6	400.2	359.5	430.7	
Export	216.2	204.2	153.4	226.4	159.3	185.0	135.5	153.2	146.9	148.2	186.7	120.6	216.6	188.5	165.9	120.0	161.9	205.8	220.8	155.0	194.4	117.6	211.2	
Seed, residual	78.9	39.9	41.1	33.7	45.7	-2.5	20.1	15.7	24.2	29.4	20.1	25.3	0.0	44.9	34.3	84.4	50.4	58.9	69.5	66.5	6.3	19.1	41.1	
TOTAL	555.2	484.1	452.7	522.4	502.2	490.8	425.7	459.6	466.6	481.6	532.2	466.3	578.3	567.4	555.9	609.2	608.7	621.8	695.7	651.1	600.9	496.2	683.1	
June 1 stocks	790.6	471.7	608.4	848.9	836.8	655.3	464.5	595.9	723.5	695.7	683.4	555.3	791.9	622.8	499.9	593.7	848.6	774.4	708.2	684.9	602.4	410.6	699.3	
Crush	248.8	210.6	242.1	241.1	265.5	255.5	225.8	278.4	285.9	304.6	290.0	298.4	325.5	324.9	318.7	353.2	375.4	370.1	395.8	395.0	375.6	327.6	401.8	
Export	179.5	113.6	61.1	76.3	147.4	97.6	56.2	84.2	110.4	109.0	91.0	79.7	107.0	150.5	93.0	78.7	127.5	171.6	121.3	137.2	104.1	48.5	85.5	
Seed, residual	17.7	-28.2	-10.9	-4.9	-12.5	0.3	0.5	-5.8	-1.8	3.1	10.1	-31.9	24.8	-35.2	-43.6	-37.9	-1.3	-55.0	-56.6	-55.3	-54.7	-71.0	-41.3	
TOTAL	446.0	296.0	292.3	312.5	400.4	352.8	282.5	356.8	394.5	416.7	391.1	346.2	457.1	439.6	368.1	393.9	501.6	486.7	460.5	476.9	425.0	299.1	446.0	
September 1 stocks	344.6	175.7	316.1	536.4	436.4	302.5	182.0	239.1	329.0	278.4	292.3	209.1	334.8	183.5	131.8	199.8	348.5	290.2	247.7	208.0	178.3	112.4	255.7	
Annual																								
Crush	1,108.0	982.7	1,030.4	1,052.8	1,178.7	1,174.5	1,057.6	1,146.4	1,186.9	1,253.7	1,278.8	1,275.6	1,405.2	1,369.4	1,435.7	1,595.1	1,589.7	1,578.8	1,650.0	1,699.7	1,615.3	1,529.7	1,696.1	
Export	905.2	743.0	598.1	740.1	756.9	801.7	527.0	622.9	557.1	683.9	769.5	589.0	838.0	851.2	881.7	870.4	801.0	973.8	996.0	1,063.5	1,045.0	887.2	1,102.7	
Seed, residual	87.0	79.0	92.0	85.9	107.0	95.4	88.7	100.4	84.0	103.6	130.2	85.3	152.0	110.4	123.6	160.3	204.6	166.2	168.3	170.1	130.2	108.5	187.4	
TOTAL	2,100.2	1,804.7	1,720.5	1,878.8	2,042.8	2,071.6	1,673.3	1,869.7	1,838.0	2,041.2	2,178.5	1,949.9	2,397.0	2,330.9	2,441.0	2,625.8	2,595.3	2,718.8	2,803.1	2,933.3	2,790.5	2,525.5	2,986.2	

Table 2. Soybean Meal Balance Sheet -- Years Beginning October 1

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
	thousand tons																
Beginning stocks	173	318	285	230	204	150	223	212	210	218	330	293	383	240	220	211	172
Production	27,719	28,325	29,831	30,364	30,514	33,270	32,527	34,210	38,176	37,792	37,591	39,385	40,292	38,213	36,325	40,707	40,663
TOTAL[a]	27,982	28,688	30,183	30,687	30,788	33,483	32,825	34,524	38,443	38,109	37,970	39,729	40,818	38,619	36,830	41,075	41,000
Domestic	22,291	22,934	23,007	24,251	25,283	26,542	26,611	27,320	28,895	30,657	30,345	31,643	33,070	32,379	31,449	33,563	33,750
Exports	5,319	5,469	6,946	6,232	5,356	6,717	6,002	6,994	9,330	7,122	7,332	7,703	7,508	6,019	5,170	7,340	7,000
TOTAL	27,610	28,403	29,953	30,483	30,639	33,260	32,613	34,314	38,225	37,779	37,677	39,346	40,578	38,399	36,619	40,903	40,750
Ending stocks	318	285	230	204	150	223	212	210	218	330	293	383	240	220	211	172	250
Price[b]	$186.48	$181.38	$189.21	$193.75	$192.86	$162.55	$235.92	$270.90	$185.28	$138.55	$167.70	$173.60	$167.73	$181.57	$256.05	$182.89	$172.50

[a] Includes imports

[b] Bulk, Decatur, Illinois 48%

Table 3. Soybean Oil Balance Sheet -- Years Beginning October 1

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
	million pounds																
Beginning stocks	1,715	1,305	1,786	2,239	1,555	1,103	1,137	2,015	1,520	1,382	1,520	1,995	2,767	2,358	1,489	1,076	1,699
Production	13,003	13,406	14,346	13,778	13,951	15,613	15,240	15,752	18,143	18,081	17,825	18,420	18,898	18,438	17,080	19,360	20,000
TOTAL[a]	14,740	14,728	16,132	16,027	15,574	16,733	16,472	17,821	19,723	19,546	19,427	20,488	21,711	20,843	18,875	20,462	21,764
Domestic	12,082	12,163	12,246	13,053	12,941	12,916	13,465	14,263	15,262	15,655	16,056	16,320	16,833	17,089	16,864	17,439	18,000
Exports	1,353	779	1,647	1,419	1,529	2,680	992	2,037	3,079	2,372	1,376	1,401	2,519	2,263	936	1,324	1,100
TOTAL	13,435	12,942	13,893	14,472	14,471	15,596	14,457	16,300	18,341	18,027	17,432	17,721	19,353	19,352	17,800	18,762	19,100
Ending stocks	1,305	1,786	2,239	1,555	1,103	1,137	2,015	1,520	1,382	1,520	1,995	2,767	2,358	1,491	1,076	1,699	2,664
Average Price[b]	22.3¢	21.0¢	19.1¢	21.4¢	27.1¢	27.6¢	24.75¢	22.5¢	25.8¢	19.9¢	15.6¢	14.2¢	16.5¢	22.0¢	30.0¢	23.0¢	22.2¢

[a] Includes imports

[b] Bulk, Decatur, Illinois

Table 4. Soybean Production by Country

Year	United States	Brazil[a]	Argentina[a]	Paraguay[a]	China	Other	World	All Foreign
				million bushels				
1970	1,127	76	2	3	254	165	1,627	500
1971	1,176	135	3	4	290	126	1,734	558
1972	1,283	184	10	4	320	66	1,867	584
1973	1,547	289	18	7	367	64	2,292	745
1974	1,215	363	18	8	349	54	2,007	792
1975	1,547	413	26	10	367	46	2,409	862
1976	1,288	460	51	14	242	128	2,183	895
1977	1,762	350	99	12	266	154	2,643	881
1978	1,870	557	136	20	278	167	2,847	977
1979	2,261	376	132	21	274	191	3,255	994
1980	1,798	558	129	22	292	176	2,975	1,177
1981	1,989	471	152	22	342	186	3,162	1,173
1982	2,190	542	154	19	332	200	3,437	1,247
1983	1,636	571	257	20	359	213	3,056	1,420
1984	1,861	672	248	35	356	248	3,421	1,561
1985	2,099	518	268	22	386	272	3,565	1,466
1986	1,943	636	257	35	427	303	3,601	1,658
1987	1,938	662	356	40	457	359	3,812	1,874
1988	1,549	852	235	60	428	387	3,506	1,957
1989	1,924	747	395	58	376	445	3,945	2,020
1990	1,926	579	423	48	404	446	3,826	1,900
1991	1,987	709	410	48	357	435	3,946	1,959
1992	2,188	827	417	64	378	434	4,308	2,120
1993	1,871	908	456	66	563	454	4,318	2,447
1994	2,517	952	459	81	588	460	5,057	2,540
1995	2,177	887	457	88	496	487	4,591	2,415
1996	2,380	1,003	412	102	486	474	4,857	2,477
1997	2,689	1,194	717	110	551	545	5,806	3,117
1998	2,741	1,150	735	112	557	577	5,872	3,131
1999	2,654	1,257	779	107	525	527	5,875	3,221
2000	2,758	1,433	1,021	129	566	525	6,432	3,674
2001	2,891	1,598	1,102	130	566	506	6,793	3,902
2002	2,756	1,911	1,304	165	607	500	7,243	4,487
2003	2,454	1,874	1,212	144	565	613	6,862	4,408
2004	3,124	1,947	1,433	149	639	629	7,921	4,797
2005	3,086	2,094	1,488	147	672	680	8,167	5,081

[a] Harvested in the spring of the following year.

Table 5. Soybean Balance Sheet -- Years Beginning September 1

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07[a]
	million bushels																	
Carryin	182	239	329	278	292	209	335	183	132	200	348	290	248	208	178	112	256	467
Production	1,924	1,926	1,987	2,190	1,870	2,515	2,174	2,380	2,689	2,741	2,654	2,758	2,891	2,756	2,454	3,124	3,086	3,155
TOTAL[b]	2,109	2,167	2,320	2,470	2,168	2,729	2,514	2,573	2,826	2,944	3,006	3,052	3,141	2,969	2,638	3,242	3,346	3,726
Crush	1,146	1,187	1,254	1,279	1,276	1,405	1,369	1,436	1,597	1,590	1,578	1,640	1,700	1,615	1,530	1,696	1,724	1,760
Export	623	557	684	770	589	838	851	882	870	805	975	996	1,064	1,045	887	1,103	890	1,100
Seed, feed, residual	101	94	103	129	94	151	111	123	159	201	163	169	169	131	109	187	165	170
TOTAL	1,870	1,838	2,041	2,178	1,954	2,394	2,331	2,441	2,626	2,596	2,716	2,804	2,933	2,791	2,526	2,986	2,779	3,030
Carryout	239	329	278	292	209	335	183	132	200	348	290	248	208	178	112	256	567	696
U.S. Average price	$5.70	$5.75	$5.58	$5.60	$6.40	$5.48	$6.77	$7.35	$6.47	$4.93	$4.63	$4.54	$4.38	$5.53	$7.34	$5.74	$5.60	$5.20

[a] Projected

[b] Includes imports

Table 6. South American Soybean Area, Yield and, Production, 1988 to Date

	Brazil			Argentina			Paraguay		
	Area	Yield	Production	Area	Yield	Production	Area	Yield	Production
Year	mil. ha.	t/ha.	mil.t	mil. ha.	t/ha.	mil. t.	mil. ha.	t/ha.	mil. t.
1988-89	12.15	1.94	23.60	4.00	1.63	6.50	0.85	1.90	1.62
1989-90	11.55	1.76	20.34	4.95	2.17	10.75	0.98	1.61	1.58
1990-91	9.75	1.62	15.75	4.75	2.42	11.50	0.89	1.46	1.30
1991-92	9.70	1.99	19.30	4.80	2.32	11.15	0.90	1.44	1.30
1992-93	10.63	2.12	22.50	4.90	2.32	11.35	0.98	1.79	1.75
1993-94	11.44	2.16	24.70	5.40	2.30	12.40	1.05	1.71	1.80
1994-95	11.68	2.22	25.90	5.70	2.19	12.50	1.10	2.00	2.20
1995-96	10.95	2.21	24.15	5.98	2.08	12.43	1.10	2.18	2.40
1996-97	11.80	2.27	26.80	6.26	1.81	11.20	1.20	2.31	2.77
1997-98	13.00	2.50	32.50	6.95	2.80	19.50	1.20	2.49	2.99
1998-99	12.90	2.43	31.30	8.17	2.45	20.00	1.20	2.54	3.05
1999-00	13.60	2.51	34.20	8.58	2.47	21.20	1.15	2.52	2.90
2000-01	13.93	2.80	39.00	10.40	2.67	27.80	1.35	2.61	3.52
2001-02	16.35	2.66	43.50	11.40	2.63	30.00	1.45	2.45	3.55
2002-03	18.45	2.82	52.00	12.60	2.82	35.50	1.55	2.90	4.50
2003-04	21.52	2.37	51.00	14.00	2.36	33.00	1.75	2.23	3.91
2004-05	22.92	2.31	53.00	14.40	2.71	39.00	2.00	2.03	4.05
2005-06	22.10	2.58	57.00	15.20	2.66	40.50	2.00	2.00	4.00

Source: USDA, FAS

Table 7. World Oilseed and Soybean Production

Year	Major Oilseeds			Soybeans		
	United States	Ex-United Stated	Total	United States	Ex-United States	Total
	million metric tons					
1977-78	56.5	93.7	150.2	47.95	23.98	71.93
1978-79	58.6	92.0	150.6	50.86	26.62	77.48
1979-80	72.4	98.1	170.5	61.72	31.79	93.51
1980-81	55.8	99.8	155.6	48.77	32.20	80.97
1981-82	64.0	105.5	169.5	54.13	31.93	86.06
1982-83	68.2	110.1	178.3	59.61	33.96	93.57
1983-84	50.4	115.1	165.5	44.52	38.64	84.16
1984-85	59.2	131.7	191.1	50.64	42.50	93.14
1985-86	65.4	130.8	196.2	57.13	39.92	97.05
1986-87	59.4	135.0	194.4	52.87	45.21	98.08
1987-88	60.6	150.0	210.6	52.75	51.06	103.81
1988-89	50.3	153.9	204.2	42.15	53.49	95.64
1989-90	59.3	153.1	212.4	52.35	55.02	107.37
1990-91	60.6	155.1	215.7	52.42	51.57	103.99
1991-92	64.3	160.0	224.3	54.07	53.31	107.38
1992-93	68.4	158.9	227.4	59.61	57.69	117.30
1993-94	59.5	168.4	227.9	50.92	66.58	117.50
1994-95	79.7	181.2	260.9	68.49	69.14	137.63
1995-96	69.1	190.6	259.7	59.24	65.72	124.96
1996-97	74.8	187.0	261.8	64.78	67.40	132.18
1997-98	83.1	203.9	287.0	73.18	84.90	158.07
1998-99	84.4	210.3	294.7	74.60	85.21	159.81
1999-00	82.3	221.1	303.4	72.22	87.68	159.90
2000-01	84.9	228.5	313.4	75.06	100.00	175.06
2001-02	89.8	235.3	325.1	78.67	106.20	184.87
2002-03	83.9	245.7	329.6	75.01	122.11	197.12
2003-04	76.6	258.3	334.9	66.78	119.97	186.75
2004-05	96.0	284.7	380.7	85.01	130.57	215.58
2005-06	96.5	294.5	391	84.00	138.28	222.26

[1]WASDE April 2006 and earlier.

Table 8. Soybean Planting Intentions, Actual Plantings, and Acres Harvested

Year	January Intentions	Mar./April Intentions	June/July Intentions	Actual	Harvested Acreage
			million acres		
1975	57.5	56.6	54.6	54.6	53.8
1976	50.9	49.3	49.0	50.3	49.4
1977	53.1	55.7	59.0	59.0	57.6
1978	63.9	63.7	64.0	64.7	63.3
1979	66.3	68.8	71.6	71.4	70.3
1980	71.6	71.3	70.3	69.9	67.8
1981	----	69.8	68.5	67.5	66.2
1982	69.5[a]	---	72.2	70.9	69.4
1983	68.8[a]	65.8[b]	63.3	63.8	62.5
1984	65.2[a]	---	68.0	67.8	66.1
1985	64.4[a]	---	63.3	63.1	61.6
1986	---	62.0	61.8	60.4	58.3
1987	---	56.9	58.7	58.180	57.172
1988	---	58.0	58.5	58.840	57.373
1989	---	61.7	61.3	60.820	59.282
1990		59.42	58.05	57.795	56.283
1991	58.5	57.12	59.78	59.180	58.169
1992		57.42	59.03	59.180	58.233
1993		59.30	61.58	60.085	57.307
1994		61.12	61.78	61.620	60.809
1995		61.45	63.105	62.495	61.544
1996		62.478	63.895	64.195	63.349
1997		68.800	70.850	70.005	69.110
1998		72.000	72.720	72.025	70.441
1999		73.105	74.205	73.730	72.446
2000		74.871	74.501	74.266	72.408
2001		76.657	75.416	74.075	72.975
2002		72.966	72.993	73.963	72.497
2003		73.182	73.653	73.404	72.476
2004		75.411	74.809	75.208	73.958
2005		73.910	73.103	72.142	71.361
2006		76.895			

[a] February 1

[b] May 1

Table 9. Planted Acres of Soybeans by Region

	Western Corn Belt[a]		Eastern Corn Belt[b]		Mid-South[c]		Southeast[d]		East Coast[e]		United States	
Region	000 acres	%	000 acres	%	000 acres	%	000 acres	%	000 acres	%	000 acres	%
1976	16,145	32.1	14,530	28.9	13,630	27.1	4,799	9.6	1,122	2.3	50,226	100.0
1979	23,370	32.7	19,620	27.5	18,470	25.9	8,360	11.7	1,591	2.2	71,411	100.0
1986	24,875	41.2	18,300	30.3	10,995	18.2	4,680	7.8	1,535	2.5	60,385	100.0
1987	24,120	41.5	18,580	31.9	10,330	17.8	3,675	6.3	1,475	2.5	58,180	100.0
1988	24,310	41.3	18,680	31.7	10,460	17.8	3,810	6.5	1,580	2.7	58,840	100.0
1989	24,790	40.8	19,020	31.3	10,750	17.7	4,460	7.3	1,800	2.9	60,820	100.0
1990	23,750	41.1	18,490	32.0	10,270	17.2	3,650	6.3	1,635	2.8	57,795	100.0
1991	26,035	44.0	19,420	32.8	8,990	15.2	3,005	5.1	1,730	2.9	59,180	100.0
1992	25,400	42.9	20,000	33.8	8,980	15.2	2,915	5.2	1,715	2.9	59,180	100.0
1993	25,300	42.1	20,410	34.0	9,690	16.1	2,915	4.9	1,770	2.9	60,085	100.0
1994	27,220	44.1	20,510	33.3	9,220	15.0	2,875	4.7	1,795	2.9	61,620	100.0
1995	28,210	45.1	21,130	33.8	9,130	14.7	2,290	3.6	1,735	2.8	62,495	100.0
1996	28,250	44.0	22,370	34.8	9,390	14.6	2,565	4.0	1,620	2.5	64,195	100.0
1997	32,450	46.4	22,610	32.3	10,390	14.8	2,777	4.0	1,778	2.5	70,005	100.0
1998	33,700	46.8	23,650	32.8	10,180	14.1	2,690	3.8	1,805	2.5	72,025	100.0
1999	35,800	48.5	24,100	32.7	9,700	13.2	2,360	3.2	1,770	2.4	73,730	100.0
2000	37,050	49.9	24,050	32.4	9,010	12.1	2,230	3.0	1,926	2.6	74,266	100.0
2001	37,700	50.9	24,650	33.3	7,685	10.4	2,135	2.9	1,905	2.5	74,075	100.0
2002	37,070	50.1	24,740	33.5	8,170	11.0	2,145	2.9	1,838	2.5	73,963	100.0
2003	37,650	51.3	23,770	32.4	7,990	10.9	2,253	3.0	1,741	2.4	73,404	100.0
2004	38,000	50.5	23,550	31.4	9,100	12.1	2,579	3.4	1,979	2.6	75,208	100.0
2005	36,450`	50.5	23,010	31.9	8,495	11.8	2,259	3.1	1,928	2.7	72,142	100.0
2006	39,250	51.0	24,450	31.8	9,050	11.8	2,188	2.9	1,957	2.5	76,895	100.0

[a] Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota

[b] Illinois, Indiana, Michigan, Ohio, Wisconsin

[c] Arkansas, Kentucky, Louisiana, Mississippi, Oklahoma, Tennessee, Texas

[d] Alabama, Florida, Georgia, North Carolina, South Carolina

e Delaware, Maryland, New Jersey, New York, Pennsylvania, Virginia, West Virginia

Table10. United States Soybean Yield Estimates

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
	million bushels																										
August 1	30.3	27.4	30.2	32.3	29.7	30.5	31.5	32.9	34.7	26.0	32.3	32.5	31.8	35.8	33.8	37.6	36.4	36.3	39.5	39.5	39.2	40.7	38.7	36.5	39.4	39.1	38.7
September 1	30.9	27.0	31.2	32.6	24.9	30.3	33.2	33.1	34.0	25.9	32.0	32.4	31.0	35.9	34.0	38.2	37.0	35.8	39.3	40.6	37.9	39.5	38.2	37.0	36.4	38.5	39.6
October 1	31.5	26.0	31.5	32.4	24.7	29.5	33.9	33.3	34.2	26.4	32.6	32.3	33.0	36.3	33.7	40.5	35.5	37.0	39.0	38.7	37.0	38.7	39.2	37.0	34.0	42.0	41.6
November 1	31.8	26.5	31.0	32.4	25.0	28.5	34.2	33.8	34.1	26.6	32.8	33.7	33.5	37.3	32.7	41.5	35.4	37.9	39.2	38.6	36.7	38.0	39.4	37.5	33.8	42.6	42.7
January 1	32.2	26.8	30.4	32.2	25.7	28.2	34.1	33.8	33.7	26.8	32.4	34.0	34.3	37.6	32.0	41.9	34.9	37.6	39.0	38.9	36.5	38.1	39.6	37.8	33.4	42.5	43.3
FINAL	32.1	26.5	30.1	31.5	26.2	28.1	34.1	33.3	33.9	27.0	32.3	34.1	34.2	37.6	32.6	41.4	35.3	37.6	38.9	38.9	36.6	38.1	39.6	38.0	33.9	42.2	

Table 11. United States Soybean Production Estimates

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
	million bushels																										
August 1	2,130	1,880	2,017	2,293	1,843	2,035	1,959	1,979	2,000	1,474	1,905	1,836	1,869	2,079	1,902	2,282	2,246	2,300	2,744	2,825	2,870	2,989	2,867	2,628	2,862	2,877	2,791
September 1	2,174	1,831	2,089	2,314	1,535	2,028	2,063	1,980	1,957	1,472	1,889	1,835	1,817	2,085	1,909	2,316	2,285	2,270	2,746	2,909	2,778	2,900	2,834	2,656	2,643	2,836	2,856
October 1	2,213	1,757	2,107	2,300	1,517	1,972	2,108	1,992	1,968	1,501	1,926	1,823	1,934	2,108	1,891	2,458	2,190	2,346	2,722	2,769	2,696	2,823	2,907	2,654	2,468	3,107	2,967
November 1	2,236	1,775	2,077	2,300	1,535	1,902	2,129	2,009	1,960	1,512	1,937	1,904	1,962	2,167	1,834	2,523	2,183	2,403	2,736	2,763	2,673	2,777	2,923	2,690	2,452	3,150	3,043
January 1	2,268	1,817	2,030	2,277	1,595	1,861	2,099	2,007	1,905	1,539	1,927	1,922	1,986	2,197	1,809	2,558	2,152	2,382	2,727	2,757	2,643	2,770	2,891	2,730	2,418	3,141	3,086
FINAL	2,261	1,798	1,989	2,190	1,636	1,861	2,099	1,943	1,938	1,549	1,924	1,926	1,987	2,190	1,870	2,515	2,174	2,380	2,689	2,741	2,654	2,758	2,891	2,756	2,454	3,124	

UNIVERSITY OF ILLINOIS EXTENSION

Grain Price OUTLOOK

A joint publication of the Department of Agricultural Economics, College of Agriculture, Purdue University, West Lafayette, Indiana, and the Department of Agricultural and Consumer Economics, College of Agricultural, Consumer and Environmental Sciences, University of Illinois at Urbana-Champaign.

CORN: CONSUMPTION TO EXPAND RAPIDLY

JULY 2006 | ***Darrel Good*** | **2006 – NO. 5**

Summary

The USDA's June 1 *Grain Stocks* report confirmed a high rate of domestic consumption of the 2005 corn crop. Along with expanded exports, large domestic use means that total use this year will likely exceed production. That trend is expected to continue in the year ahead as reduced acreage points to a smaller crop and consumption is expected to increase by 550 million bushels, or 5 percent. Much of the expected increase is in corn used for ethanol production. A trend yield and a reduction in year ending stocks to about 1.07 billion bushels, point to a 2006-07 marketing year average farm price of about $2.50 per bushel, $.50 above the average expected for the current year and the highest in 10 years.

The biggest uncertainty for the next two months centers around the size of the 2006 U.S. corn crop. Weather and growing conditions have been less than ideal, with declining crop condition ratings during July. Each one bushel difference between actual yield and trend yield (149 bushels) would alter the average farm price forecast by $.06 to $.08 per bushel. Beyond harvest, the Chinese import/export situation for corn may be the most important demand factor.

Old Crop Consumption

Consumption of U.S. corn during the 2005-06 marketing year is proceeding at a record pace (Table 1). Exports during the March-May 2006 quarter, at 565 million bushels, were the largest in 10 years. Exports continued large in June and the first half of July. Census Bureau export estimates are available only through May, but based on USDA estimates, cumulative exports through July 13 were likely about 215 million bushels larger than on the same date last year. Export inspections though July 13 were 240 million bushels larger than last year's cumulative inspections. However, last year inspections through May trailed Census Bureau estimates by 76.5 million bushels. This year, that deficit was only 45.3 million bushels. For the year, the USDA projects U.S. corn exports at 2.1 billion bushels, 286 million more than shipped last year. Shipments during the last 7 weeks of the year will need to average about 44.5 million bushels per week to reach the USDA projection. That is about 10 million per week more than the pace during the same period last year. Unshipped sales as of July 13 were 90 million larger than unshipped sales of a year ago. About 2.5 million bushels had been sold to China with another 46 million bushels sold to "unknown" destinations. It appears that shipments will reach, or even exceed, the USDA projection. We are using a projection of 2.11 billion bushels.

Feed and residual use of corn was extremely large during the first half of the 2005-06 marketing year. At 3.883 billion bushels, use exceeded the record of a year ago by 90 million bushels. Use during the third quarter totaled 1.281 billion bushels, 31 million less than use during the same quarter last year. Use during the last half of the 2005-06 marketing year was surprisingly large, perhaps suggesting that the 2004 crop was overestimated or that an unusually larger quantity of corn was lost due to storage in temporary facilities. In the 8 years prior to 2004-05, feed and residual use during the first three quarters of the year accounted for 83.7 to 85.5 percent of the total for the year. The average was 84.4 percent. If use this year is following an average pattern, use

during the first three quarters points to a total of about 6.12 billion bushels for the year. The USDA projects use at 6.1 billion. Use could be larger than these projections, however, due to the sharp decline in wheat production and much higher wheat prices this summer.

For the year, the USDA projects food, seed, and industrial use of corn at 2.975 billion bushels, 10.8 percent more than used last year. Of the expected increase of 289 million bushels, 277 million is for ethanol production. Total processing use during the first three quarters of the year is estimated at 2.188 billion bushels 10.5 percent more than used during the same period last year. Use during the final quarter needs to total 787 million bushels, or 11.5 percent more than used last year, to reach the USDA's projection for the year. The forecast appears accurate at this point.

It appears that consumption of U.S. corn during the current year will reach 11.205 billion bushels, leaving year ending stocks of about 2.03 billion bushels, or 18.1 percent of expected consumption. Year-ending stocks will be only slightly smaller than stocks at the beginning fo the year (Table 2).

Potential Size of 2006 Crop

The USDA's June *Acreage* report showed that U.S. producers planted 79.366 million acres of corn for all purposes in 2006 (Table 3). That estimate is 2.393 million less than planted in 2005, but 1.347 million more than producers indicated in March. About half of the acreage decline occurred in the eastern corn belt and about 30 percent in the southern plains states. More acres were planted in North Dakota. The June survey of acreage estimated that 72.091 million acres of corn would be harvested for grain in 2006, 3.016 million fewer acres than harvested last year. Last year, acreage harvested for grain represented an unusually large percentage of corn planted for all purposes. The estimate of acreage harvested for silage or abandoned in 2006, 7.275 million acres, is typical.

Considerable uncertainty surrounds potential yield of the 2006 corn crop. The growing season has been less than ideal with excessive precipitation presenting a problem in the early spring in the far eastern corn belt and dryness now presenting a problem in far western areas. The USDA's weekly report of crop conditions reflected deteriorating conditions in late June through mid-July. As of July 16, only 62 percent of the crop in the largest 18 corn producing states was rated in good or excellent condition. This compares to 71 percent rated good or excellent on June 25, 2006. At the same time last year, only 55 percent of the crop was rated in either good or excellent condition.

Crop condition ratings for the U.S. corn crop were available beginning with the 1986 crop. Since that time there has been a strong relationship between the percent of the crop rated good or excellent in the last report of the season and the U.S. average trend-adjusted yield. That relationship is estimated as: yield = 108.48 bushels + .6521 x % of crop rated good or excellent. The estimated relationship explains 88 percent of the variation in annual trend-adjusted corn yields over the past 20 years. However, in each of the past 7 years, the U.S. average corn yield has been higher than the yield forecast by crop condition ratings. The difference ranged from 0.4 bushels in 2000 to 7.4 bushels in 2004 and averaged 3.3 bushels. In 2005, the average yield was 4.4 bushels higher than projected based on crop condition ratings. Interestingly, prior to the most recent 7 years, average yields were less than predicted by the model for 4 consecutive years. Except for "extreme" years like 1993 (excessive flooding) and 2004 (exceptional favorable weather) the model has worked reasonably well as a general indicator of average yield.

The obvious difficulty in applying the model is that it is based on the last observation of crop conditions of the season. It's usefulness is in answering the question, If crop conditions remain at current levels, what would be the expected yield? With 62 percent of the crop rated in good or excellent condition, for example, the model would point to an average yield of 148.9 bushels. If the model continues to underestimate yield, however, a rating of 62 percent good or excellent might suggest a yield of 150 to 152 bushels. For each percentage point change in the portion of the crop rated good or excellent, the average yield expectation would change .65 bushels per acre, equal to about 47 million bushels of production.

A 2006 average yield near trend value of 149 bushels per acre would produce a crop of about 10.74 billion bushels. Current crop ratings suggest that a trend yield is attainable, but critical weather is just ahead. The USDA will release the first forecast of 2006 yield potential on August 11, 2006. That forecast will be based on farmer surveys and crop observations in late July. Until

then, the market will continue to take its cue from the crop condition ratings.

Consumption to Grow

Consumption of U.S. corn will continue to grow rapidly during the year ahead, with ethanol use of corn leading the way. The USDA projects that corn used for ethanol production will grow from 1.6 billion bushels this year to 2.15 billion during the 2006-07 marketing year. There is little disagreement that growth will be large. The rate of increase will be determined primarily by the rate of construction of new processing facilities. Numerous facilities are in various stages of planning. Corn used for other food and industrial products is expected to grow by only 10 million bushels, bringing total use to 3.535 billion bushels.

Domestic feed and residual use of corn will be supported by continued profitability of livestock production in 2006-07 and by a small expansion in livestock numbers. The USDA projects a 0.7 percent increase in the number of grain consuming animal units. A significant decline in feeding of other grains will also support feed use of corn, although those quantities are small. The major uncertainty centers around the degree of substitution of corn gluten feed and distillers dried grain for whole corn feeding. Potentially, a 550 million bushel increase in corn used for ethanol production would produce enough by-product to substitute for about 90 million bushels of corn. That substitution could keep the level of corn feeding near the level of this year. USDA projects a 50 million bushel decline in feed and residual use. Based on our forecast for this year, that would put use during the year ahead at 6.07 billion bushels.

There is also potential for exports of U.S. corn to expand modestly in 2006-07 following the surge during the current year. A 2.5 percent reduction in wheat production outside of the U.S. coupled with only a small increase in foreign coarse grain production should keep world demand for U.S. corn at a high level. Argentina is expected to have a larger corn harvest which will allow them to export an additional 120 million bushels of corn during the year ahead, but the Ukraine and Brazil may have fewer bushels to export. The main focus, however, will be on China. China exported about 300 million bushels of corn in 2004-05 and is expected to export about 160 million bushels this year. The USDA projects Chinese exports at 160 million bushels again in 2006-07, which would result in a sharp decline in year ending stocks there. China has purchased small quantities of U.S. corn this year (2.5 million bushels), but no sales have been registered for next year. There is some chance that China could become a more significant importer of corn late in the 2006-07 marketing year.

The USDA currently projects a 50 million bushel increase in U.S. corn exports to all destinations during the year ahead. That projection is used here, but there is the possibility of larger shipments. As of July 13, U.S. exporters had sold 102 million bushels of corn for export during the 2006-07 marketing year. At the same time last year, only 36 million bushels had been sold.

Based on the estimates developed here, consumption of U.S. corn during the year ahead could jump to 11.755 billion bushels, reducing year-ending stocks to 1.026 billion bushels if the 2006 average yield is near trend value. That scenario suggests that price rationing would not be required, but means that production needs to expand in 2007.

Likely Acreage Response

The sharp increase in corn consumption and draw down in U.S. and world inventories of corn during the year ahead suggest that U.S. producers will need to expand production in 2007 and beyond. That expansion will require some increase in acreage in 2007. With December 2007 corn futures trading near $3.00 it would seem that there is strong incentive to increase corn acreage in 2007. However, the prices of other crops, soybeans and particularly wheat, are also sharply higher for 2007. July 2007 wheat futures at Chicago are near $4.50, Kansas City near $4.80, and Minneapolis over $5.00. In addition, the cost of corn production will likely remain high. Winter wheat producers will be the first to report on 2007 acreage decisions.

Initially, it would seem that planted acreage of corn in 2007 would at least return to the 2005 level near 81.8 million acres, resulting in harvested acreage near 75 million. With a trend yield near 150.5 bushels, however, that acreage would produce a crop of only about 11.3 billion bushels. If potential consumption in 2007-08 is near 12 billion bushels, a crop of at least 11.8 billion will be required. That suggests that harvested acreage needs to be near 78.4 million and planted acreage needs to be near

85.5 million just to avoid price rationing. Will producers, expand corn plantings by 6 million acres in 2007?

Price Prospects

Monthly average U.S. cash corn prices reached a marketing year low of $1.77 in November 2005 and a high of $2.17 in May 2006. With the majority of the 2005 crop already priced, it appears that the marketing year weighted average price will be between $1.95 and $2.00. Based on our forecast of the year-ending stocks-to-use ratio of 18.12 percent, a marketing year average farm price of $1.95 would be expected. It appears, then, that cash corn prices are accurately reflecting market fundamentals.

The average daily spot cash price in central Illinois reached a marketing year low of $1.635 on October 18, 2005. The high to date is $2.435, established on July 12, 2006. The pattern is very similar to that of the 2004-05 marketing year, when the low was reached on November 4 and the high on July 18. Basis levels continue to be relatively weak, with the average central Illinois price $.27 under September futures on July 19. That basis is about $.07 weaker than the weak basis of a year ago. The weak basis reflects higher transportation and interest costs, large supplies of old crop, and likely some speculative premium in the futures market.

Basis for harvest delivery of the new crop is also relatively weak. On July 19, harvest bids averaged $.36 under December futures in central Illinois, compared to $.24 at this time last year, $.22 in 2004, and $.16 in 2003. Basis in far southern Illinois was $.42 under December compared to about $.25 under at this time last year. Again, the weak basis likely reflects increased costs and some speculative premium in the futures market.

For the 2006-07 marketing year, our projections result in a year-ending stocks-to-use ratio of 8.73 percent, suggesting a 2006-07 marketing year average price in the $2.50 to $2.55 range. At the close of trade on July 20, December 2006 futures settled at $2.59, with deferred contracts at progressively higher prices. September 2007 futures settled at $2.97. Based on the historic relationship between the average monthly cash price received by farmers and the average futures price during the month, and assuming producers spread the sales of the 2006 crop throughout the year in a typical fashion, the futures market suggested a marketing year average cash price near $2.60. That price implies a year-ending stocks-to-use ratio of 8.1 percent, or 950 million bushels based on our projections of use. A carryover of 950 million implies a crop of about 10.66 billion bushels and a U.S. average yield of 148.1 bushels per acre. That yield expectation implies that crop condition ratings will continue to decline from the current 62 percent good or excellent to about 58 percent good or excellent.

Current new crop futures appear to accurately reflect prospective fundamentals. Prices will continue to follow weather and crop condition ratings, providing opportunity to price additional quantities of the 2006 crop if December 2006 futures trade above $2.70. The large carry in the market also makes prices for the 2007 and 2008 crops appear attractive. Some caution is suggested for pricing those crops. Strong demand, a needed increase in acreage, and 2007 weather uncertainty could make those prices very volatile.

The large carry in the market also makes storage of the 2006 crop look attractive. In central Illinois, for example, the harvest bid on July 19 was $.67 under July 2007 futures price. That large basis implies a large return to storage, depending on the magnitude of basis next spring. At a historical level of $.10 under in May, the market would be offering $.57 to cover interest and storage costs. If basis is $.25 to $.30 under as it was in May 2006, the market is offering $.37 to $.42 to cover storage and interest. With an interest rate of 8.25 percent on a price of $2.25, the interest cost from October 2006 to May 2007 would be about $.11. Commercial storage costs from harvest to May would be near $.22, bring the total cost to about $.33. Basis conditions differ significantly from area to area and storage costs vary by region and by type of storage-- on farm or off farm. Producers will want to carefully calculate the likely return to storage. In addition, the only way to capture the return that the market is offering is to forward price the crop for delivery after harvest.

Issued by Darrel Good
Extension Economist
University of Illinois

Table 1. Corn Quarterly Balance Sheet

	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
										million bushels													
September 1 stocks	3,523	1,006	1,648	4,040	4,882	4,259	1,930	1,344	1,521	1,100	2,113	850	1,558	426	883	1,308	1,787	1,718	1,899	1,596	1,087	958	2,114
Production	4,174	7,672	8,875	8,226	7,131	4,929	7,532	7,934	7,475	9,477	6,338	10,051	7,400	9,233	9,207	9,759	9,431	9,915	9,503	8,968	10,089	11,807	11,112
TOTAL[a]	7,699	8,680	10,534	12,267	12,016	9,191	9,464	9,282	9,016	10,584	8,472	10,910	8,974	9,672	10,099	11,085	11,232	11,640	11,412	10,578	11,190	12,776	13,236
September-November																							
Seed, food, ind.	227	244	276	295	296	302	312	338	361	370	383	410	417	388	435	450	459	456	492	549	588	643	697
Export	493	503	415	318	396	471	582	383	421	488	435	449	660	487	380	450	535	507	448	393	470	499	481
Feed, residual	1,326	1,301	1,219	1,348	1,551	1,344	1,487	1,619	1,673	1,814	1,701	1,963	1,778	1,885	2,030	2,118	2,188	2,131	2,200	1,986	2,166	2,175	2,235
TOTAL	2,046	2,048	1,910	1,961	2,243	2,117	2,381	2,339	2,455	2,672	2,519	2,822	2,856	2,759	2,845	3,018	3,182	3,104	3,140	2,928	3,224	3,317	3,413
December 1 stocks	5,652	6,631	8,615	10,305	9,771	7,072	7,082	6,940	6,547	7,906	5,937	8,080	6,106	6,903	7,247	8,052	8,039	8,530	8,265	7,638	7,954	9,452	9,815
Seed, food, ind.	212	236	262	281	288	301	313	330	362	365	379	410	405	400	425	434	447	465	482	563	609	637	708
Export	506	580	460	313	405	502	682	471	362	463	330	590	562	525	380	465	465	415	448	390	506	440	473
Feed, residual	1,069	1,192	1,306	1,463	1,444	1,065	1,276	1,351	1,267	1,401	1,240	1,492	1,344	1,486	1,503	1,460	1,529	1,607	1,540	1,557	1,571	1,618	1,648
TOTAL	1,787	2,008	2,028	2,057	2,137	1,866	2,271	2,152	1,991	2,229	1,949	2,493	2,311	2,411	2,308	2,359	2,441	2,488	2,471	2,510	2,686	2,695	2,829
March 1 stocks	3,865	4,823	6,587	8,248	7,636	5,204	4,812	4,789	4,561	5,678	3,996	5,592	3,800	4,494	4,940	5,698	5,602	6,043	5,795	5,132	5,271	6,756	6,987
Seed, food, ind.	253	294	307	333	337	353	376	384	414	414	423	452	433	471	470	495	512	514	539	617	676	700	783
Export	513	475	201	496	510	592	601	454	371	411	270	568	610	433	350	497	451	455	497	393	465	427	565
Feed, residual	954	1,019	1,091	1,088	951	841	993	960	1,042	1,146	950	1,159	1,044	1,097	1,084	1,097	1,058	1,153	1,166	1,141	1,166	1,312	1,281
TOTAL	1,720	1,788	1,599	1,917	1,798	1,786	1,970	1,798	1,828	1,971	1,642	2,180	2,087	2,001	1,904	2,089	2,022	2,122	2,203	2,151	2,307	2,439	2,629
June 1 stocks	2,145	2,836	4,990	6,332	5,839	3,419	2,843	2,992	2,739	3,709	2,360	3,415	1,718	2,497	3,040	3,616	3,586	3,924	3,597	2,985	2,970	4,321	4,363
Seed, food, ind.	238	293	307	324	331	341	369	374	396	407	429	442	373	460	475	467	496	512	532	611	664	706	
Export	374	292	151	365	406	463	503	419	430	301	293	570	396	353	394	572	485	564	512	411	459	448	
Feed, residual	527	603	499	761	843	665	627	679	816	891	789	846	527	809	865	792	890	951	958	879	892	1,057	
TOTAL	1,139	1,188	957	1,450	1,580	1,489	1,499	1,472	1,642	1,599	1,511	1,858	1,295	1,617	1,734	1,831	1,871	2,027	2,002	1,900	2,015	2,211	
September 1 stocks	1,006	1,648	4,040	4,882	4,259	1,930	1,344	1,521	1,100	2,113	850	1,558	426	883	1,308	1,787	1,718	1,899	1,596	1,087	958	2,114	
Annual																							
Seed, food, ind.	930	1,067	1,152	1,233	1,251	1,298	1,370	1,425	1,533	1,556	1,613	1,715	1,628	1,714	1,805	1,846	1,913	1,957	2,046	2,340	2,537	2,686	
Export	1,887	1,850	1,227	1,492	1,716	2,029	2,367	1,727	1,584	1,663	1,328	2,177	2,228	1,797	1,504	1,989	1,937	1,941	1,905	1,588	1,900	1,814	
Feed, residual	3,876	4,115	4,114	4,660	4,789	3,934	4,382	4,609	4,798	5,252	4,680	5,460	4,693	5,277	5,482	5,468	5,665	5,842	5,864	5,563	5,795	6,162	
TOTAL	6,693	7,032	6,494	7,385	7,757	7,260	8,120	7,761	7,916	8,471	7,622	9,352	8,548	8,789	8,791	9,298	9,515	9,741	9,815	9,491	10,232	10,662	

[a] Includes imports for the entire year.

Table 2. Corn Annual Balance Sheet

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06[a]	2006-07
						million bushels												
Carryin	1,930	1,344	1,521	1,100	2,113	850	1,558	426	883	1,308	1,787	1,718	1,899	1,596	1,087	958	2,114	2,031
Production	7,532	7,934	7,475	9,477	6,338	10,051	7,400	9,233	9,207	9,759	9,431	9,915	9,503	8,968	10,089	11,807	11,112	10,740
TOTAL[b]	9,464	9,282	9,016	10,584	8,472	10,910	8,974	9,672	10,099	11,085	11,232	11,659	11,412	10,578	11,190	12,776	13,236	12,781
Seed, food, industrial	1,370	1,425	1,533	1,556	1,613	1,715	1,628	1,714	1,805	1,846	1,913	1,957	2,046	2,340	2,537	2,686	2,975	3,535
Export	2,367	1,727	1,584	1,663	1,328	2,177	2,228	1,797	1,504	1,981	1,937	1,935	1,905	1,588	1,897	1,814	2,100	2,150
Feed and residual	4,382	4,609	4,798	5,252	4,680	5,460	4,693	5,277	5,482	5,471	5,664	5,848	5,864	5,563	5,798	6,162	6,120	6,070
TOTAL	8,120	7,761	7,915	8,471	7,621	9,352	8,548	8,789	8,791	9,298	9,515	9,741	9,815	9,491	10,232	10,662	11,205	11,755
Carryout	1,344	1,521	1,100	2,113	850	1,558	426	883	1,308	1,787	1,718	1,899	1,596	1,087	958	2,114	2,031	1,026
U.S. average price	$2.36	$2.28	$2.37	$2.07	$2.50	$2.26	$3.24	$2.71	$2.45	$1.94	$1.82	$1.85	$1.97	$2.32	$2.42	$2.06	$1.95	$2.50

[a] Projected

[b] Includes imports

Table 3. United States Corn Planting Intentions, Actual Plantings, and Acres Harvested

	Planted Acreage				
Year	February/January Intentions	March Intentions	June Intentions	Actual	Harvested Acreage
			thousand acres		
1976	80,822	82,727	84,092	84,588	71,506
1977	84,526	83,923	82,735	84,328	71,614
1978	80,944	80,237	78,717	81,675	71,930
1979	80,676	79,209	79,751	81,394	72,400
1980	83,131	82,022	83,478	84,043	72,961
1981	...	83,977	84,677	84,097	74,524
1982	...	84,735	82,129	81,857	72,719
1983	69,569[a]	58,812	60,129	60,217	51,479
1984	...	81,766	79,940	80,617	71,897
1985	...	82,021	83,217	83,398	75,209
1986	...	78,066	76,646	76,580	68,907
1987	...	67,556	66,024	66,200	59,505
1988	...	66,926	67,519	67,717	58,250
1989	...	73,253	72,790	72,322	64,783
1990	...	74,804	74,574	74,166	66,952
1991	77,500	76,124	75,909	75,957	68,822
1992		79,007	79,335	79,311	72,077
1993		76,486	74,259	73,239	62,933
1994		78,625	78,767	78,921	72,514
1995		75,323	72,800	71,479	65,210
1996		79,920	80,355	79,229	72,644
1997		81,416	80,227	79,537	72,671
1998		80,781	80,798	80,165	72,589
1999		78,219	77,611	77,386	70,487
2000		77,881	79,579	79,551	72,440
2001		76,693	76,109	75,702	68,768
2002		79,047	78,847	78,894	69,330
2003		79,022	79,066	78,603	70,944
2004		79,004	80,968	80,929	73,631
2005		81,413	81,592	81,759	75,107
2006		78,019	79,366		72,091

[a] February

Table 4. United States Corn Yield Estimates

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
	bushels per acre																														
July 1	93.0	90.5	89.4	90.1	95.8	99.3	95.9	...	...	...	...	...	...	87.0																	
August 1	87.4	86.7	87.3	96.1	102.1	93.0	104.3	113.9	99.9	107.9	110.6	120.4	121.4	78.5	112.8	117.7	107.8	121.3	116.0	128.4	125.6	118.7	125.3	130.0	134.7	141.9	133.9	125.2	139.9	148.9	139.2
September 1	85.1	82.8	89.7	100.3	104.6	91.8	107.1	113.9	85.1	106.3	113.3	119.7	119.9	78.5	112.4	121.7	106.1	121.4	113.1	129.0	121.1	120.2	125.2	132.0	132.2	141.8	133.5	125.4	138.5	149.4	143.2
October 1	86.2	82.7	90.8	100.7	106.4	90.8	109.0	114.2	82.9	105.5	115.1	119.2	119.9	80.2	114.4	120.3	108.8	123.8	110.3	133.8	116.6	123.0	125.8	132.0	133.5	139.6	136.3	127.2	142.2	158.4	146.1
November 1	87.2	85.5	91.5	101.2	109.2	90.8	109.2	114.2	80.5	105.9	116.6	119.3	120.3	82.3	116.6	119.0	108.6	129.3	103.1	138.4	113.7	126.5	126.4	133.3	134.5	137.7	138.0	127.6	143.2	160.2	148.4
January 1	86.2	87.4	90.8	101.2	109.4	91.0	109.9	114.8	81.6	106.6	118.0	119.3	119.4	84.6	116.2	118.5	108.6	131.4	100.7	138.6	113.5	127.1	127.0	134.4	133.8	137.1	138.2	130.0	142.2	160.4	147.9
FINAL	86.4	88.0	90.8	101.0	109.5	91.0	108.9	113.2	81.1	106.7	118.0	119.3	119.8	84.6	116.3	118.5	108.6	131.5	100.7	138.6	113.5	127.1	126.7	134.4	133.8	136.9	138.2	129.3	142.2	160.7	

Table 5. United States Corn Production Estimates

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
									million bushels																
July	7,116	...	...	...	...	...	...	5,200																	
August	7,735	8,315	5,237	7,668	8,266	8,316	7,231	4,479	7,348	7,850	7,418	8,762	7,423	9,214	8,122	8,695	9,276	9,592	9,561	10,369	9,266	8,886	10,064	10,923	10,350
September	7,940	8,319	4,390	7,552	8,469	8,268	7,141	4,462	7,321	8,118	7,295	8,770	7,229	9,257	7,832	8,804	9,268	9,738	9,381	10,362	9,238	8,849	9,944	10,961	10,639
October	8,081	8,315	4,259	7,498	8,603	8,220	7,139	4,553	7,449	8,022	7,479	8,938	6,962	9,602	7,541	9,012	9,312	9,743	9,467	10,192	9,430	8,970	10,207	11,613	10,857
November	8,097	8,330	4,121	7,527	8,717	8,223	7,166	4,671	7,590	7,935	7,479	9,329	6,503	10,010	7,374	9,265	9,359	9,836	9,537	10,054	9,546	9,003	10,278	11,741	11,032
January	8,201	8,397	4,204	7,656	8,865	8,253	7,064	4,921	7,527	7,933	7,474	9,479	6,344	10,103	7,374	9,293	9,366	9,761	9,437	9,968	9,507	9,008	10,114	11,807	11,112
FINAL	8,119	8,235	4,174	7,672	8,875	8,226	7,131	4,929	7,532	7,934	7,475	9,477	6,338	10,051	7,400	9,233	9,207	9,759	9,431	9,915	9,503	8,967	10,089	11,807	

UNIVERSITY OF ILLINOIS EXTENSION

Grain Price OUTLOOK

A joint publication of the Department of Agricultural Economics, College of Agriculture, Purdue University, West Lafayette, Indiana, and the Department of Agricultural and Consumer Economics, College of Agricultural, Consumer and Environmental Sciences, University of Illinois at Urbana-Champaign.

SOYBEANS: HOW LONG WILL SURPLUS PERSIST?

JULY 2006 ***Darrel Good*** **2006 – No. 6**

Summary

Compared to the wheat and corn markets, the soybean market has been relatively tame for the last several months. Record large world stocks, increased soybean acreage in the U.S., and prospects for at least a trend yield in the U.S. suggest that surpluses will continue for another year. Soybean oil prices have been supported by speculative demand in light of prospects for increased bio-fuel demand, even though domestic soybean oil stocks have grown to the highest level in four years. Soybean meal prices remain at a low level, reflecting the large supply situation.

Soybean prices have traded in a wide, sideways pattern since mid-January. August 2006 futures have traded between $5.75 and $6.25, while November futures have between $5.85 and $6.40. As of July 24, August futures were near the bottom of the range and November futures were mid-range. With a trend yield or higher, the average price of soybeans during the 2006-07 marketing year may be near $5.65, the same level as this year. However, if speculatively demand cools, the price would be expected to be in the $5.30 to $5.50 range. As of July 24, the futures market reflected an average 2006-07 marketing year farm price near $6.00.

Old Crop Supplies

Stocks of U.S. soybeans on June 1, 2006 were estimated at 990.1 million bushels, 290.8 million more than on the same date last year and the largest ever June 1 inventory. Still, stocks were about 25 million bushels less than expected, suggesting that third quarter disappearance totaled 680.1 million bushels, only 3 million below the record of a year ago (Table 1). The crush during the third quarter was a record 431.3 million bushels, 600,000 above the previous record of last year. The seasonal pattern of domestic crush is relatively stable from year to year. Over the past 10 years, crush during the first three quarters of the marketing year has accounted for 76.2 to 78.6 percent of the total for the year. The 10-year average is 76.9 percent. The average of the past 5 years is 76.8 percent. If crush is following an average pattern this year, the total should reach 1.707 billion bushels, about 11 million above last year's crush and about 7 million above the record crush of 2001-02. The estimated crush reported by members of the National Oilseed Processors Association for June suggests that the domestic crush is proceeding a bit more rapidly. The USDA projects the crush at 1.72 billion, which implies that 76.2 percent of the crush occurred in the first three quarters of the marketing year. That is within historical experience.

Another way to gauge the prospective crush is based on likely product use. Crush is still driven by demand for soybean meal.. Domestic use of soybean meal during the first 8 months of the marketing year (October 2005 through May 2006) totaled 22.458 million tons, marginally less than used during the same period last year. Use was on pace to reach 33.525 million tons for the year. The USDA projects use at 33.4 million tons. We use a projection of 33.45 million tons.

Soybean meal exports during the first 8 months of the year reached 5.276 million tons, 2.2 percent less than during the same period last year. For the year, the USDA projects exports at 7.2 million tons, 1.9 percent less than exported last year. As of July 13, the USDA's *Export Sales* report

indicated that combined exports and outstanding export sales of U.S. soybean meal totaled 6.574 million tons, 6.5 percent larger than commitments of a year ago. We are using a projection of 7.268 million tons. The current pace of domestic and export use of soybean meal points to total consumption of 40.718 million tons (Table 2) suggesting that crush might exceed the USDA's projection of 1.72 billion bushels. We are using a forecast of 1.725 billion bushels (Table 3).

If 1.725 billion bushels of soybeans are crushed, about 20.185 billion pounds of soybean oil will be produced. Through the first 8 months of the current marketing year, domestic oil consumption totaled 11.758 billion pounds, 2.56 percent more than consumed during the same period last year. For the year, the USDA projects consumption at 17.95 billion pounds, 2.93 percent more than consumed last year. That projection appears high. We are using a forecast of 17.9 billion pounds. Through the first 8 months of the year, soybean oil exports reached 804.5 million pounds, 19.4 percent less than exported during the same period last year. For the year, the USDA projects exports at 1.075 billion pounds, 18.8 percent less than exported last year. As of July 13, commercial exports and outstanding export sales were 26.9 percent smaller than commitments of a year ago. It appears unlikely that exports will exceed the USDA projection. Based on projections developed here, year ending stocks of soybean oil will total a record 2.959 billion pounds, 110 million above the USDA projection and 1.26 billion larger than stocks at the beginning of the year (Table 4).

Exports of U.S. soybeans started the year slowly, totaling only 622 million bushels during the first half of the year, 184 million less than shipped a year earlier. Exports during the third quarter were relatively large, at 185.5 million bushels, but still 25.7 million less than shipped during the third quarter last year (Table 1). Since early May, however, export sales have been larger than expected and have exceeded those of last year, due in part to strong Chinese demand, a smaller than expected Brazilian crop, and delays in shipping Brazilian soybeans. Exports during June 2006 exceeded those of June 2005 by about 10 million bushels. As of July 13, the USDA's *Export Sales* report showed cumulative exports for the year at 857.2 million bushels, 136.8 million less than the total of a year ago. Last year cumulative exports reported in the *Export Sales* report tracked the Census Bureau cumulative estimates very closely by May and continued to do so through August. This year, the two sources reported almost identical totals through April, but the Census Bureau estimate for May exceeded the USDA estimate by nearly 10 million bushels. For the year, the USDA projects exports at 905 million bushels. Unshipped sales as of July 13 totaled 73.5 million bushels. Compared to only 46.6 million on the same date last year. If the *Export Sales* report is still trailing the Census Bureau estimates, shipments during the last 7 weeks of the marketing year need to average only 5.6 million bushels per week to reach the USDA forecast. Shipments averaged 9.4 million bushels per week for the 4 weeks ended July 13. Exports will likely exceed 905 million bushels. We are using a forecast of 915 million bushels (Table 4).

Residual use of soybeans, was unusually large during the third quarter of the 2005-06 marketing year, explaining why June 1 stocks were smaller than expected. In the past, large residual use during the first three quarters has been followed by one of three scenarios–the soybeans were found in September, the crop estimate was revised, or a large residual continued to be carried in the balance sheet. For the time being, the USDA is carrying a larger than normal residual in the balance sheet. The issue will be resolved with the September *Grains Stocks* report.

Forecasts developed here, point to 2005-06 marketing year ending stocks of 529 million bushels, 16 million less than forecast by USDA. Whatever the level of stocks, they will be near record large and represent a surplus going into the 2006-07 marketing year.

New Crop Prospects

The USDA reported in its June *Acreage* report that U.S. farmers planted 74.93 million acres of soybeans in 2006 (Table 5). That is 2.788 million more than planted in 2005, but 1.965 million fewer acres than reported in the March survey of producer intentions. The record for U.S. soybean acreage was 75.208 million in 2004. Most of the year-over-year increase in soybean acreage in 2006 occurred in the western corn belt, lead by an increase of 850,000 acres in North Dakota. Illinois producers increased acreage by 500,000, while acreage was reduced in southeastern and eastern states (Table 6). Harvested acreage is forecast at 73.935 million, 2.574 million more than harvested last year and just 23,000 below the record of 2004.

The size of the 2006 U.S. crop will remain very uncertain until late in the growing season. The market will monitor the weekly USDA report of crop conditions to gauge yield potential until the first production forecast is released on August 11.

The weekly crop condition report has been available for the largest producing states since 1986. Over the past 20 years, there has been a reasonable correlation between the percentage of the crop rated good or excellent in the last report of the season and the U.S. average trend-adjusted yield. Crop ratings have explained about 85 percent of the annual variation in yields. The difference between predicted and actual yield was less than 1 bushel except for 1991, 1993, 2003 and 2005. The largest misses were in 2003, when the average was 2.77 bushels lower than predicated, and in 2005 when the yield was 1.99 bushels higher than predicted. For 2006, the yield model is as follows:

Expected yield = 30.649 + .1953 X % of crop rated good or excellent. The model can be used to judge yield potential, for example, if current crop conditions remain unchanged through the remainder of the season. Crop conditions generally declined in July, with 54 percent of the crop rated in good or excellent condition on July 23. A year ago, 54 percent was also rated in good or excellent condition. Last year, the poorest ratings were in Arkansas, Illinois, and Missouri. This year the poorest ratings are in Arkansas, Louisiana, and the Dakotas. A good to excellent rating of 54 percent projects to an average yield of 41.2 bushels per acre. The USDA calculates trend yield at 40.7 bushels. The portion of the crop rated good or excellent will have to decline to about 51 percent to point to a yield at trend. A trend yield would produce a crop of 3.01 billion bushels, 76 million less than the 2005 crop and 114 million less than the record crop of 2004.

Demand is Difficult to Gauge

Traditionally, judging potential domestic demand for soybean meal and oil has been pretty straightforward. Soybean meal use generally changed in line with animal numbers and oil use expanded at about the rate of population growth. Exports were more difficult to anticipate due to uncertainties about world production of soybeans and competing crops and the rate of growth of world demand. Exports of U.S. soybeans were a function of world demand growth, mainly China in recent years, and soybean production in South America. Demand is becoming more difficult to anticipate.

The fundamentals of the soybean meal market are not changing rapidly, except that by-product feed from ethanol production is providing sorne low-priced competition in the domestic feed market. That competition likely explains the decline in domestic soybean meal this year in spite of low meal prices and expanding livestock production. The soybean oil market, however, may be changing more dramatically as biofuel production expands. It is not clear how rapidly domestic or international demand for vegetable oils will expand, but producers of palm oil (Malaysia and Indonesia) seem to be planning on a rapid expansion in the year ahead.

The other major uncertainly for the year ahead centers around Brazilian production prospects. The economic and financial difficulties of Brazilian producers have been well publicized, with some suggesting a significant reduction in planted acreage this year. Higher production costs, unfavorable exchange rates, and disappointing yields all contribute to the weaker environment for soybeans. Production has continued to expand in Brazil, reaching 2.02 billion bushels in 2006 (Table 7), but production has fallen short of potential for the past three years, following record yields in 2003. Production in Argentina and the remainder of South America continues to expand slowly.

For the year ahead, the USDA expects soybean area to decline by 4.5 percent in Brazil and to increase by 2.7 percent in Argentina. For all of South America, area is expected to decline by 1.3 percent. With a yield near average, South American production would reach a record 3.85 billion bushels in 2007. The planting and growing season will be monitored closely to gauge production potential. The negative impacts of increased production in South America may be offset by growing consumption of soybeans in South America and in China. The USDA currently projects that U.S. soybean exports will increase by 185 million bushels during the 2006-07 marketing year, to a total of 1.09 billion bushels. Brazilian exports are expected to stagnate and Argentine exports are expected to decline. The projected U.S. exports appear a little optimistic at this point. We are using a forecast of 1.075 billion bushels, 160 million above our forecast for the current year.

The domestic crush of soybeans during the year ahead will be a function of meal and oil demand. The USDA projects a 2.1 percent increase in domestic meal consumption following a small decline this year. Given the slow rate of increase in livestock production and increased competition from other feeds, that forecast also appears optimistic. We use a forecast of 33.85 million tons, which is 1.2 percent above our forecast for the current year. USDA forecasts U.S. soybean

meal exports at 7.75 million tons, reflecting expectations of growing world demand and stagnant exports from South America. If that forecast is correct, 41.435 million tons of U.S. soybean meal will need to be produced to accommodate consumption of 41.6 million tons. With an average yield of 47.6 pounds of meal per bushel, about 1.74 billion bushels of soybeans would need to be crushed in 2006-07, 15 million more than the expected crush for the current year.

If 1.74 billion bushels of soybeans are crushed, about 19.66 billion pounds of oil will be produced, if the oil yield from the 2006 crop is near a typical 11.3 pounds per bushel. The yield this year is exceptionally high, averaging over 11.6 pounds from October 2005 through May 2006. The USDA projects domestic soybean oil use during the year ahead at 19 billion pounds, nearly 6 percent above use expected for this year. The long term growth rate is domestic use is about 2 percent. The additional 4 percent growth, about 700 million pounds, presumably reflects expected growth in fuel use of soybean oil. Soybean oil exports are forecast at 1.2 billion pounds, nearly 12 percent above expected exports for the current year, reflecting reduced competition from other oilseeds (Table 9) and perhaps increased use of palm oil for fuel production. Based on the projections developed here, soybean oil stocks would be reduced during the year ahead, but remain at a high level. Viewed differently, soybean oil consummation could exceed the projected level by one billion pounds, or 5 percent, without threatening the supply of oil. It appears that the soybean crush pace next year will continue to be dictated by meal needs, not oil needs.

Price Prospects

Soybean prices during the 2005-06 marketing year have followed an unusual pattern at times. As expected with a large crop, cash prices bottomed in October 2005, but the harvest low in the central Illinois' average cash price series of $5.15 was higher than expected and $.35 above the harvest low in 2004. That cash price moved to a high of $6.05 on January 4, 2006 with no apparent fundamental support, and then traded in a range of $5.30 to $5.80 from the second week of January through the third week of July. The price is currently near $5.55.

The U.S. average farm price for the 2005-06 marketing year will be near $5.65, about $.25 higher than would be expected based on the size of the U.S. and world surplus. Most of the unexpected price strength has been generated by soybean oil prices. Central Illinois plant prices averaged about $.23 per pound from October 2005 through June 2006, but exceeded $.26 in mid-July. The average price has been marginally higher than the average of year ago in spite of an accumulation in stocks to the highest level in 4 years. Soybean meal (48 percent protein) prices at central Illinois plants averaged about $177 per ton from October through June, and were near $165 in mid-July. The average has been near that of a year ago, but prices peaked well over $200 in June and July 2005.

For the year ahead, meal prices may average below the $175 experienced this year, while oil prices may average above the $.23 experienced this year. If so, the 2006-07 marketing year average price of soybeans may be near the $5.65 experienced this year. Based on our projection of the year-ending stock-to-use ratio, the 2006-07 average should be close to $5.40, based on historical relationships. If the speculative premium (primarily in the soybean oil market) dissipates, soybean prices could be lower in the year ahead than the average experienced this year. At this close of trade on July 24, the futures market reflected a 2006-07 marketing year average farm price near $6.00. If crop condition ratings continue to point to a 2006 average yield near trend, further price declines might be expected, or at least a continuation of a very weak basis.

Longer term, there is some expectation that U.S. producers will plant more corn in response to growing demand and fewer soybean acres. If that is the case, South American producers will have to expand production. Increasingly, soybean prices will be determined by the price required to encourage production in Brazil.

Issued by Darrel Good
Extension Economist
University of Illinois

Table 1. Soybean Quarterly Balance Sheet

	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
	million bushels																							
September 1 stocks	254.5	344.6	175.7	316.1	536.4	436.4	302.5	182.0	239.1	329.0	278.4	292.3	209.1	334.8	183.5	131.8	199.8	348.5	290.2	247.7	208.0	178.3	112.4	255.7
Production	2,190.3	1,635.8	1,860.9	2,099.1	1,942.6	1,937.7	1,548.8	1,923.8	1,925.9	1,986.6	2,190.4	1,869.7	2,514.9	2,174.3	2,380.3	2,688.8	2,741.0	2,653.8	2,757.8	2,890.7	2,756.1	2,453.7	3,123.7	3,086.4
TOTAL	2,444.8	1,980.4	2,036.6	2,415.2	2,479.0	2,374.1	1,855.3	2,108.8	2,167.0	2,319.6	2,470.8	2,167.0	2,730.0	2,514.1	2,572.8	2,825.6	2,943.8	3,006.3	3,052.0	3,141.3	2,968.8	2,637.6	3,241.7	3,346.1
September-November																								
Crush	284.2	269.6	253.7	267.5	295.8	293.4	275.4	273.0	304.1	322.0	328.2	329.6	346.2	351.4	360.6	395.8	409.3	426.7	420.9	427.5	417.5	419.4	427.4	442.4
Export	245.9	190.6	153.4	166.5	218.5	260.8	138.3	168.5	120.1	167.1	235.9	176.0	230.9	233.6	289.7	365.3	268.5	297.8	315.5	348.6	320.4	385.7	405.8	315.8
Seed, residual	-36.2	48.5	14.8	21.5	10.1	64.6	74.8	56.6	58.8	51.5	70.7	79.8	50.9	95.7	97.4	66.9	78.5	98.9	75.6	89.6	112.3	140.5	99.3	82.5
TOTAL	493.9	508.7	421.9	455.4	522.4	618.8	488.5	498.1	483.0	540.6	634.8	585.4	628.0	681.7	747.7	826.2	758.8	823.4	812.0	865.7	850.2	945.6	932.4	840.7
December 1 stocks	1,950.9	1,471.7	1,614.7	1,959.8	1,956.6	1,755.3	1,366.8	1,610.7	1,684.0	1,779.0	1,836.0	1,573.6	2,102.0	1,833.4	1,825.1	1,999.4	2,186.4	2,182.7	2,240.0	2,275.6	2,115.4	1,688.7	2,304.6	2,502.1
Crush	314.9	262.5	276.4	281.9	320.1	317.3	286.3	304.3	301.4	323.1	335.2	327.2	371.8	359.0	400.7	443.1	408.6	408.1	417.9	447.6	422.0	423.2	436.2	437.2
Export	263.6	234.6	230.2	270.9	233.7	258.9	197.0	217.0	178.7	259.6	255.9	212.7	283.5	278.7	333.1	306.4	243.1	315.4	338.4	422.7	425.5	335.1	400.2	306.2
Seed, residual	26.6	18.8	47.0	35.7	63.8	33.0	-6.7	33.9	12.8	19.6	29.3	12.1	76.5	5.3	35.5	46.9	77.0	63.2	79.8	69.3	66.9	25.9	88.3	90.3
TOTAL	605.1	515.9	553.6	588.5	617.6	609.2	476.6	555.2	493.9	602.3	620.4	552.0	731.8	643.0	769.3	796.5	728.7	786.7	836.1	939.6	914.4	784.2	924.7	833.7
March 1 stocks	1,345.8	955.8	1,061.1	1,371.3	1,339.0	1,146.1	890.2	1,055.5	1,190.1	1,177.3	1,215.6	1,021.6	1,370.2	1,190.4	1,055.8	1,202.9	1,457.3	1,396.0	1,403.9	1,336.0	1,202.0	905.8	1,381.4	1,669.2
Crush	260.1	240.0	258.2	262.3	297.2	308.3	270.1	290.7	295.5	304.0	325.4	320.4	361.7	334.0	355.7	404.9	396.4	373.9	405.4	429.6	400.2	359.5	430.7	431.3
Export	216.2	204.2	153.4	226.4	159.3	185.0	135.5	153.2	146.9	148.2	186.7	120.6	216.6	188.5	165.9	120.0	161.9	205.8	220.8	155.0	194.4	117.6	211.2	185.5
Seed, residual	78.9	39.9	41.1	33.7	45.7	-2.5	20.1	15.7	24.2	29.4	20.1	25.3	0.0	44.9	34.3	84.4	50.4	58.9	69.5	66.5	6.3	19.1	41.1	63.3
TOTAL	555.2	484.1	452.7	522.4	502.2	490.8	425.7	459.6	466.6	481.6	532.2	466.3	578.3	567.4	555.9	609.2	608.7	621.8	695.7	651.1	600.9	496.2	683.1	680.1
June 1 stocks	790.6	471.7	608.4	848.9	836.8	655.3	464.5	595.9	723.5	695.7	683.4	555.3	791.9	622.8	499.9	593.7	848.6	774.4	708.2	684.9	602.4	410.6	699.3	990.1
Crush	248.8	210.6	242.1	241.1	265.5	255.5	225.8	278.4	285.9	304.6	290.0	298.4	325.5	324.9	318.7	353.2	375.4	370.1	395.8	395.0	375.6	327.6	401.8	
Export	179.5	113.6	61.1	76.3	147.4	97.6	56.2	84.2	110.4	109.0	91.0	79.7	107.0	150.5	93.0	78.7	127.5	171.6	121.3	137.2	104.1	48.5	85.5	
Seed, residual	17.7	-28.2	-10.9	-4.9	-12.5	0.3	0.5	-5.8	-1.8	3.1	10.1	-31.9	24.6	-35.2	-43.6	-37.9	-1.3	-55.0	-56.6	-55.3	-54.7	-71.0	-41.6	
TOTAL	446.0	296.0	292.3	312.5	400.4	352.8	282.5	356.8	394.5	416.7	391.1	346.2	457.1	439.6	368.1	393.9	501.6	486.7	460.5	476.9	425.0	299.1	445.8	
September 1 stocks	344.6	175.7	316.1	536.4	436.4	302.5	182.0	239.1	329.0	278.4	292.3	209.1	334.8	183.5	131.8	199.8	348.5	290.2	247.7	208.0	178.3	112.4	255.7	
Annual																								
Crush	1,108.0	982.7	1,030.4	1,052.8	1,178.7	1,174.5	1,057.6	1,146.4	1,186.9	1,253.7	1,278.8	1,275.6	1,405.2	1,369.4	1,435.7	1,595.1	1,589.7	1,578.8	1,650.0	1,699.7	1,615.3	1,529.7	1,696.1	
Export	905.2	743.0	598.1	740.1	756.9	801.7	527.0	622.9	557.1	683.9	769.5	589.0	838.0	851.2	881.7	870.4	801.0	973.8	996.0	1,063.5	1,045.0	887.2	1,102.7	
Seed, residual	87.0	79.0	92.0	85.9	107.0	95.4	88.7	100.4	94.0	103.6	130.2	85.3	152.0	110.4	123.6	160.3	204.6	166.2	168.3	170.1	130.2	108.5	187.2	
TOTAL	2,100.2	1,804.7	1,720.5	1,878.8	2,042.6	2,071.6	1,673.3	1,869.7	1,838.0	2,041.2	2,178.5	1,949.9	2,397.0	2,330.9	2,441.0	2,625.8	2,595.3	2,718.8	2,803.1	2,933.3	2,790.5	2,525.5	2,986.0	

Table 2. Soybean Meal Balance Sheet -- Years Beginning October 1

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
	thousand tons																	
Beginning stocks	173	318	285	230	204	150	223	212	210	218	330	293	383	240	220	211	172	250
Production	27,719	28,325	29,831	30,364	30,514	33,270	32,527	34,210	38,176	37,792	37,591	39,385	40,292	38,213	36,325	40,715	40,631	41,435
TOTAL[a]	27,982	28,688	30,183	30,687	30,788	33,483	32,825	34,524	38,443	38,109	37,970	39,729	40,818	38,619	36,830	41,073	40,968	41,850
Domestic	22,291	22,934	23,007	24,251	25,283	26,542	26,611	27,320	28,895	30,657	30,345	31,643	33,070	32,379	31,449	33,561	33,450	33,850
Exports	5,319	5,469	6,946	6,232	5,356	6,717	6,002	6,994	9,330	7,122	7,332	7,703	7,508	6,019	5,170	7,340	7,268	7,750
TOTAL	27,610	28,403	29,953	30,483	30,639	33,260	32,613	34,314	38,225	37,779	37,677	39,346	40,578	38,399	36,619	40,901	40,718	41,600
Ending stocks	318	285	230	204	150	223	212	210	218	330	293	383	240	220	211	172	250	250
Price[b]	$186.48	$181.38	$189.21	$193.75	$192.86	$162.55	$235.92	$270.90	$185.28	$138.55	$167.70	$173.60	$167.73	$181.57	$256.05	$182.89	$175.00	$170.00

[a] Includes imports

[b] Bulk, Decatur, Illinois 48%

Table 3. Soybean Balance Sheet – Years Beginning September 1

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07[a]
	million bushels																	
Carryin	182	239	329	278	292	209	335	183	132	200	348	290	248	208	178	112	256	529
Production	1,924	1,926	1,987	2,190	1,870	2,515	2,174	2,380	2,689	2,741	2,654	2,758	2,891	2,756	2,454	3,124	3,086	3,010
TOTAL[b]	2,109	2,167	2,320	2,470	2,168	2,729	2,514	2,573	2,826	2,944	3,006	3,052	3,141	2,969	2,638	3,242	3,346	3,543
Crush	1,146	1,187	1,254	1,279	1,276	1,405	1,369	1,436	1,597	1,590	1,578	1,640	1,700	1,615	1,530	1,696	1,725	1,740
Export	623	557	684	770	589	838	851	882	870	805	975	996	1,064	1,045	887	1,103	915	1,075
Seed, feed,	101	94	103	129	94	151	111	123	159	201	163	169	169	131	109	187	177	170
TOTAL	1,870	1,838	2,041	2,178	1,954	2,394	2,331	2,441	2,626	2,596	2,716	2,804	2,933	2,791	2,526	2,986	2,817	2,985
Carryout	239	329	278	292	209	335	183	132	200	348	290	248	208	178	112	256	529	558
U.S. Average	$5.70	$5.75	$5.58	$5.60	$6.40	$5.48	$6.77	$7.35	$6.47	$4.93	$4.63	$4.54	$4.38	$5.53	$7.34	$5.74	$5.65	$5.65

[a] Projected

[b] Includes imports

Table 4. Soybean Oil Balance Sheet -- Years Beginning October 1

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
	million pounds																	
Beginning stocks	1,715	1,305	1,786	2,239	1,555	1,103	1,137	2,015	1,520	1,382	1,520	1,995	2,767	2,358	1,489	1,076	1,699	2,959
Production	13,003	13,406	14,346	13,778	13,951	15,613	15,240	15,752	18,143	18,081	17,825	18,420	18,898	18,438	17,080	19,360	20,185	19,660
TOTAL[a]	14,740	14,728	16,132	16,027	15,574	16,733	16,472	17,821	19,723	19,546	19,427	20,488	21,711	20,843	18,875	20,462	21,934	22,674
Domestic	12,082	12,163	12,246	13,053	12,941	12,916	13,465	14,263	15,262	15,655	16,056	16,320	16,833	17,089	16,864	17,439	17,900	19,000
Exports	1,353	779	1,647	1,419	1,529	2,680	992	2,037	3,079	2,372	1,376	1,401	2,519	2,263	936	1,324	1,075	1,200
TOTAL	13,435	12,942	13,893	14,472	14,471	15,596	14,457	16,300	18,341	18,027	17,432	17,721	19,353	19,352	17,800	18,763	18,975	20,200
Ending stocks	1,305	1,786	2,239	1,555	1,103	1,137	2,015	1,520	1,382	1,520	1,995	2,767	2,358	1,491	1,076	1,699	2,959	2,474
Average Price[b]	22.3¢	21.0¢	19.1¢	21.4¢	27.1¢	27.6¢	24.75¢	22.5¢	25.8¢	19.9¢	15.6¢	14.2¢	16.5¢	22.0¢	30.0¢	23.0¢	23.5¢	25.0¢

[a] Includes imports

[b] Bulk, Decatur, Illinois

Table 5. Soybean Planting Intentions, Actual Plantings, and Acres Harvested

Year	January Intentions	Mar./April Intentions	June/July Intentions	Actual	Harvested Acreage
			million acres		
1975	57.5	56.6	54.6	54.6	53.8
1976	50.9	49.3	49.0	50.3	49.4
1977	53.1	55.7	59.0	59.0	57.6
1978	63.9	63.7	64.0	64.7	63.3
1979	66.3	68.8	71.6	71.4	70.3
1980	71.6	71.3	70.3	69.9	67.8
1981	----	69.8	68.5	67.5	66.2
1982	69.5[a]	---	72.2	70.9	69.4
1983	68.8[a]	65.8[b]	63.3	63.8	62.5
1984	65.2[a]	---	68.0	67.8	66.1
1985	64.4[a]	---	63.3	63.1	61.6
1986	---	62.0	61.8	60.4	58.3
1987	---	56.9	58.7	58.180	57.172
1988	---	58.0	58.5	58.840	57.373
1989	---	61.7	61.3	60.820	59.282
1990		59.42	58.05	57.795	56.283
1991	58.5	57.12	59.78	59.180	58.169
1992		57.42	59.03	59.180	58.233
1993		59.30	61.58	60.085	57.307
1994		61.12	61.78	61.620	60.809
1995		61.45	63.105	62.495	61.544
1996		62.478	63.895	64.195	63.349
1997		68.800	70.850	70.005	69.110
1998		72.000	72.720	72.025	70.441
1999		73.105	74.205	73.730	72.446
2000		74.871	74.501	74.266	72.408
2001		76.657	75.416	74.075	72.975
2002		72.966	72.993	73.963	72.497
2003		73.182	73.653	73.404	72.476
2004		75.411	74.809	75.208	73.958
2005		73.910	73.103	72.142	71.361
2006		76.895	79.930		73.935

[a] February 1

[b] May 1

Table 6. Planted Acres of Soybeans by Region

	Western Corn Belt[a]		Eastern Corn Belt[b]		Mid-South[c]		Southeast[d]		East Coast[e]		United States	
Region	000 acres	%	000 acres	%	000 acres	%	000 acres	%	000 acres	%	000 acres	%
1976	16,145	32.1	14,530	28.9	13,630	27.1	4,799	9.6	1,122	2.3	50,226	100.0
1979	23,370	32.7	19,620	27.5	18,470	25.9	8,360	11.7	1,591	2.2	71,411	100.0
1986	24,875	41.2	18,300	30.3	10,995	18.2	4,680	7.8	1,535	2.5	60,385	100.0
1987	24,120	41.5	18,580	31.9	10,330	17.8	3,675	6.3	1,475	2.5	58,180	100.0
1988	24,310	41.3	18,680	31.7	10,460	17.8	3,810	6.5	1,580	2.7	58,840	100.0
1989	24,790	40.8	19,020	31.3	10,750	17.7	4,460	7.3	1,800	2.9	60,820	100.0
1990	23,750	41.1	18,490	32.0	10,270	17.2	3,650	6.3	1,635	2.8	57,795	100.0
1991	26,035	44.0	19,420	32.8	8,990	15.2	3,005	5.1	1,730	2.9	59,180	100.0
1992	25,400	42.9	20,000	33.8	8,980	15.2	2,915	5.2	1,715	2.9	59,180	100.0
1993	25,300	42.1	20,410	34.0	9,690	16.1	2,915	4.9	1,770	2.9	60,085	100.0
1994	27,220	44.1	20,510	33.3	9,220	15.0	2,875	4.7	1,795	2.9	61,620	100.0
1995	28,210	45.1	21,130	33.8	9,130	14.7	2,290	3.6	1,735	2.8	62,495	100.0
1996	28,250	44.0	22,370	34.8	9,390	14.6	2,565	4.0	1,620	2.5	64,195	100.0
1997	32,450	46.4	22,610	32.3	10,390	14.8	2,777	4.0	1,778	2.5	70,005	100.0
1998	33,700	46.8	23,650	32.8	10,180	14.1	2,690	3.8	1,805	2.5	72,025	100.0
1999	35,800	48.5	24,100	32.7	9,700	13.2	2,360	3.2	1,770	2.4	73,730	100.0
2000	37,050	49.9	24,050	32.4	9,010	12.1	2,230	3.0	1,926	2.6	74,266	100.0
2001	37,700	50.9	24,650	33.3	7,685	10.4	2,135	2.9	1,905	2.5	74,075	100.0
2002	37,070	50.1	24,740	33.5	8,170	11.0	2,145	2.9	1,838	2.5	73,963	100.0
2003	37,650	51.3	23,770	32.4	7,990	10.9	2,253	3.0	1,741	2.4	73,404	100.0
2004	38,000	50.5	23,550	31.4	9,100	12.1	2,579	3.4	1,979	2.6	75,208	100.0
2005	36,450	50.5	23,010	31.9	8,495	11.8	2,259	3.1	1,928	2.7	72,142	100.0
2006	38,150	50.9	23,850	31.8	8,800	11.7	2,207	3.0	1,923	2.6	74,930	100.0

[a] Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota

[b] Illinois, Indiana, Michigan, Ohio, Wisconsin

[c] Arkansas, Kentucky, Louisiana, Mississippi, Oklahoma, Tennessee, Texas

[d] Alabama, Florida, Georgia, North Carolina, South Carolina

e Delaware, Maryland, New Jersey, New York, Pennsylvania, Virginia, West Virginia

Table 7. Soybean Production by Country

Year	United States	Brazil[a]	Argentina[a]	Paraguay[a]	China	Other	World	All Foreign
				million bushels				
1970	1,127	76	2	3	254	165	1,627	500
1971	1,176	135	3	4	290	126	1,734	558
1972	1,283	184	10	4	320	66	1,867	584
1973	1,547	289	18	7	367	64	2,292	745
1974	1,215	363	18	8	349	54	2,007	792
1975	1,547	413	26	10	367	46	2,409	862
1976	1,288	460	51	14	242	128	2,183	895
1977	1,762	350	99	12	266	154	2,643	881
1978	1,870	557	136	20	278	167	2,847	977
1979	2,261	376	132	21	274	191	3,255	994
1980	1,798	558	129	22	292	176	2,975	1,177
1981	1,989	471	152	22	342	186	3,162	1,173
1982	2,190	542	154	19	332	200	3,437	1,247
1983	1,636	571	257	20	359	213	3,056	1,420
1984	1,861	672	248	35	356	248	3,421	1,561
1985	2,099	518	268	22	386	272	3,565	1,466
1986	1,943	636	257	35	427	303	3,601	1,658
1987	1,938	662	356	40	457	359	3,812	1,874
1988	1,549	852	235	60	428	387	3,506	1,957
1989	1,924	747	395	58	376	445	3,945	2,020
1990	1,926	579	423	48	404	446	3,826	1,900
1991	1,987	709	410	48	357	435	3,946	1,959
1992	2,188	827	417	64	378	434	4,308	2,120
1993	1,871	908	456	66	563	454	4,318	2,447
1994	2,517	952	459	81	588	460	5,057	2,540
1995	2,177	887	457	88	496	487	4,591	2,415
1996	2,380	1,003	412	102	486	474	4,857	2,477
1997	2,689	1,194	717	110	551	545	5,806	3,117
1998	2,741	1,150	735	112	557	577	5,872	3,131
1999	2,654	1,257	779	107	525	527	5,875	3,221
2000	2,758	1,433	1,021	129	566	525	6,432	3,674
2001	2,891	1,598	1,102	130	566	506	6,793	3,902
2002	2,756	1,911	1,304	165	607	500	7,243	4,487
2003	2,454	1,874	1,212	144	565	613	6,862	4,408
2004	3,124	1,947	1,433	149	639	643	7,935	4,811
2005	3,086	2,021	1,488	147	632	691	8,065	4,979
2006	3,010	2,058	1,518	173	621	710	8,090	5,080

[a] Harvested in the spring of the following year.

Table 8. South American Soybean Area, Yield and, Production, 1988 to Date

	Brazil			Argentina			Paraguay		
	Area	Yield	Production	Area	Yield	Production	Area	Yield	Production
Year	mil. ha.	t/ha.	mil.t	mil. ha.	t/ha.	mil. t.	mil. ha.	t/ha.	mil. t.
1988-89	12.15	1.94	23.60	4.00	1.63	6.50	0.85	1.90	1.62
1989-90	11.55	1.76	20.34	4.95	2.17	10.75	0.98	1.61	1.58
1990-91	9.75	1.62	15.75	4.75	2.42	11.50	0.89	1.46	1.30
1991-92	9.70	1.99	19.30	4.80	2.32	11.15	0.90	1.44	1.30
1992-93	10.63	2.12	22.50	4.90	2.32	11.35	0.98	1.79	1.75
1993-94	11.44	2.16	24.70	5.40	2.30	12.40	1.05	1.71	1.80
1994-95	11.68	2.22	25.90	5.70	2.19	12.50	1.10	2.00	2.20
1995-96	10.95	2.21	24.15	5.98	2.08	12.43	1.10	2.18	2.40
1996-97	11.80	2.27	26.80	6.26	1.81	11.20	1.20	2.31	2.77
1997-98	13.00	2.50	32.50	6.95	2.80	19.50	1.20	2.49	2.99
1998-99	12.90	2.43	31.30	8.17	2.45	20.00	1.20	2.54	3.05
1999-00	13.60	2.51	34.20	8.58	2.47	21.20	1.15	2.52	2.90
2000-01	13.93	2.80	39.00	10.40	2.67	27.80	1.35	2.61	3.52
2001-02	16.35	2.66	43.50	11.40	2.63	30.00	1.45	2.45	3.55
2002-03	18.45	2.82	52.00	12.60	2.82	35.50	1.55	2.90	4.50
2003-04	21.52	2.37	51.00	14.00	2.36	33.00	1.75	2.23	3.91
2004-05	22.92	2.31	53.00	14.40	2.71	39.00	2.03	2.03	4.05
2005-06	22.00	2.50	55.00	15.00	2.70	40.50	2.00	2.00	4.00
2006-07	21.00	2.67	56.00	15.40	2.68	41.30	2.00	2.35	4.70

Source: USDA, FAS

Table 9. World Oilseed and Soybean Production

Year	Major Oilseeds			Soybeans		
	United States	Ex-United Stated	Total	United States	Ex-United States	Total
	million metric tons					
1977-78	56.5	93.7	150.2	47.95	23.98	71.93
1978-79	58.6	92.0	150.6	50.86	26.62	77.48
1979-80	72.4	98.1	170.5	61.72	31.79	93.51
1980-81	55.8	99.8	155.6	48.77	32.20	80.97
1981-82	64.0	105.5	169.5	54.13	31.93	86.06
1982-83	68.2	110.1	178.3	59.61	33.96	93.57
1983-84	50.4	115.1	165.5	44.52	38.64	84.16
1984-85	59.2	131.7	191.1	50.64	42.50	93.14
1985-86	65.4	130.8	196.2	57.13	39.92	97.05
1986-87	59.4	135.0	194.4	52.87	45.21	98.08
1987-88	60.6	150.0	210.6	52.75	51.06	103.81
1988-89	50.3	153.9	204.2	42.15	53.49	95.64
1989-90	59.3	153.1	212.4	52.35	55.02	107.37
1990-91	60.6	155.1	215.7	52.42	51.57	103.99
1991-92	64.3	160.0	224.3	54.07	53.31	107.38
1992-93	68.4	158.9	227.4	59.61	57.69	117.30
1993-94	59.5	168.4	227.9	50.92	66.58	117.50
1994-95	79.7	181.2	260.9	68.49	69.14	137.63
1995-96	69.1	190.6	259.7	59.24	65.72	124.96
1996-97	74.8	187.0	261.8	64.78	67.40	132.18
1997-98	83.1	203.9	287.0	73.18	84.90	158.07
1998-99	84.4	210.3	294.7	74.60	85.21	159.81
1999-00	82.3	221.1	303.4	72.22	87.68	159.90
2000-01	84.9	228.5	313.4	75.06	100.00	175.06
2001-02	89.8	235.3	325.1	78.67	106.20	184.87
2002-03	83.9	245.7	329.6	75.01	122.11	197.12
2003-04	76.6	258.3	334.9	66.78	119.97	186.75
2004-05	95.9	285.3	381.3	85.01	130.94	215.95
2005-06	96.1	293.5	389.6	84.00	135.49	219.49
2006-07	91.8	294.9	386.7	81.92	138.26	220.18

[1]WASDE July 2006 and earlier.

Table10. United States Soybean Yield Estimates

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
	million bushels																										
August 1	30.3	27.4	30.2	32.3	29.7	30.5	31.5	32.9	34.7	26.0	32.3	32.5	31.8	35.8	33.8	37.6	36.4	36.3	39.5	39.5	39.2	40.7	38.7	36.5	39.4	39.1	38.7
September 1	30.9	27.0	31.2	32.6	24.9	30.3	33.2	33.1	34.0	25.9	32.0	32.4	31.0	35.9	34.0	38.2	37.0	35.8	39.3	40.6	37.9	39.5	38.2	37.0	36.4	38.5	39.6
October 1	31.5	26.0	31.5	32.4	24.7	29.5	33.9	33.3	34.2	26.4	32.6	32.3	33.0	36.3	33.7	40.5	35.5	37.0	39.0	38.7	37.0	38.7	39.2	37.0	34.0	42.0	41.6
November 1	31.8	26.5	31.0	32.4	25.0	28.5	34.2	33.8	34.1	26.6	32.8	33.7	33.5	37.3	32.7	41.5	35.4	37.9	39.2	38.6	36.7	38.0	39.4	37.5	33.8	42.6	42.7
January 1	32.2	26.8	30.4	32.2	25.7	28.2	34.1	33.8	33.7	26.8	32.4	34.0	34.3	37.6	32.0	41.9	34.9	37.6	39.0	38.9	36.5	38.1	39.6	37.8	33.4	42.5	43.3
FINAL	32.1	26.5	30.1	31.5	26.2	28.1	34.1	33.3	33.9	27.0	32.3	34.1	34.2	37.6	32.6	41.4	35.3	37.6	38.9	38.9	36.6	38.1	39.6	38.0	33.9	42.2	

Table 11. United States Soybean Production Estimates

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
	million bushels																										
August 1	2,130	1,880	2,017	2,293	1,843	2,035	1,959	1,979	2,000	1,474	1,905	1,836	1,869	2,079	1,902	2,282	2,246	2,300	2,744	2,825	2,870	2,989	2,867	2,628	2,862	2,877	2,791
September 1	2,174	1,831	2,089	2,314	1,535	2,028	2,063	1,980	1,957	1,472	1,889	1,835	1,817	2,085	1,909	2,316	2,285	2,270	2,746	2,909	2,778	2,900	2,834	2,656	2,643	2,836	2,856
October 1	2,213	1,757	2,107	2,300	1,517	1,972	2,108	1,992	1,968	1,501	1,926	1,823	1,934	2,108	1,891	2,458	2,190	2,346	2,722	2,769	2,696	2,823	2,907	2,654	2,468	3,107	2,967
November 1	2,236	1,775	2,077	2,300	1,535	1,902	2,129	2,009	1,960	1,512	1,937	1,904	1,962	2,167	1,834	2,523	2,183	2,403	2,736	2,763	2,673	2,777	2,923	2,690	2,452	3,150	3,043
January 1	2,268	1,817	2,030	2,277	1,595	1,861	2,099	2,007	1,905	1,539	1,927	1,922	1,986	2,197	1,809	2,558	2,152	2,382	2,727	2,757	2,643	2,770	2,891	2,730	2,418	3,141	3,086
FINAL	2,261	1,798	1,989	2,190	1,636	1,861	2,099	1,943	1,938	1,549	1,924	1,926	1,987	2,190	1,870	2,515	2,174	2,380	2,689	2,741	2,654	2,758	2,891	2,756	2,454	3,124	

UNIVERSITY OF ILLINOIS EXTENSION

Grain Price OUTLOOK

A joint publication of the Department of Agricultural Economics, College of Agriculture, Purdue University, West Lafayette, Indiana, and the Department of Agricultural and Consumer Economics, College of Agricultural, Consumer and Environmental Sciences, University of Illinois at Urbana-Champaign.

SOYBEANS: RECORD CROP, BUT PRICES MOVE HIGHER

OCTOBER 2006 ***Darrel Good*** **2006 – NO. 8**

Summary

The 2005-06 U.S. soybean marketing year ended with smaller than expected inventories, forcing a downward revision in the estimated size of the 2005 crop. The USDA's October *Crop Production* report forecast a record 2006 crop of 3.189 billion bushels and the USDA's World Outlook Board projected that U.S. soybean stocks would grow from 449 million bushels on September 1, 2006 to a record 555 million bushels on September 1, 2007.

Early projections are for a 4.5 percent reduction in Brazilian soybean acreage to be harvested in 2007, but a 2 percent larger crop if yields rebound from the low levels of the past 3 years. A similar increase in Argentine production is expected, based on expectations of a small increase in acreage and average yields. If those projections materialize, world inventories will establish a new record for the third consecutive year. U.S. producers are expected to reduce acreage in 2007 as corn acreage expands.

November 2006 soybean futures prices traded generally between $5.90 and $6.40 from January through mid-August 2006, declined to a contract low of $5.365 in mid-September, and then rallied to a high of $6.135 on October 20. The USDA projects the 2006-07 marketing year average farm price in a range of $4.90 to $5.90. The historic relationship between the year-ending stocks-to-use ratio and the average farm price suggests a 2006-07 average near $5.50, based on the projected stocks-to-use ratio of 17.6 percent. On October 20, the settlement prices of November 2006 through September 2007 futures contracts suggested an average farm price near $6.00. The average spot cash price in central Illinois was $5.80. The market appears to be providing some good early season pricing opportunities.

Large U.S. Supplies

The USDA's October *Crop Production* report forecast the 2006 U.S. soybean crop at 3.189 billion bushels, 126 million larger than the 2005 crop, and 65 million larger than the previous record crop of 2004 (Table 1). The forecast was 96 million bushels larger than the September forecast and 261 million larger than the August forecast. The largest year-over-year increase in production (nearly 17 percent) is forecast for Illinois.

The production forecast reflects a national average yield of 42.8 bushels per acre. That forecast is one bushel above the September forecast and 3.2 bushels above the August forecast, but 0.2 bushels below the record yield of 2005 (Table 2). State average yields are projected at 51 bushels in Illinois and

Nebraska and 50 bushels in Indiana and Iowa.

Based on October revisions, reflecting certified acreage information from the Farm Service Agency, planted and harvested acreage of soybeans were record large in 2006. Planted acreage, at 75.565 million, exceeded 2005 acreage by 3.423 million and exceeded the previous record of 2004 by 357,000 acres(Table 3). The forecast of harvested acreage of 74.505 million exceeds the 2004 record by 547,000. The western corn belt and northern plains states accounted for 51.2 percent of the planted acreage of soybeans in 2006, just below the record 51.3 percent in 2003 (Table 4). Acreage in the southern and eastern areas of the U.S. accounted for only 16.9 percent of the total acreage this year.

In the 34 years since 1972, the January estimate of the size of the U.S. soybean crop has exceeded the October forecast 18 times, was smaller 15 times, and equaled the October forecast once. In 9 of those 34 years, the production forecast was increased in both September and October, like this year. In those 9 years, the January estimate was above the October forecast 5 times and below 4 times. History provides little guidance on expected change, if any, between the October forecast and the January estimate this year. However, the season-ending crop condition ratings, showing 62 percent of the crop in good or excellent condition, points to an average yield of 42.8 bushels, equal to the USDA's October forecast. However, with a relatively high 18 percent of the crop rated in excellent condition, a slightly higher yield estimate would not be surprising. Changes in harvested acreage estimates should be small. At this juncture, we expect the January production estimate to be close to the October forecast.

Consumption to Increase As Well

U.S. soybean exports were at a modest level of 947.2 million bushels during the 2005-06 marketing year, 155.5 million below the record exports of 2004-05 and the second smallest in 7 years. Exports were especially small in the first half of the year, but fourth quarter shipments were the highest in 6 years (Table 5). The decline in U.S. exports in 2005-06 reflected an 80 million bushels (18 percent) drop in shipments to China and a 90 million bushel (54 percent) drop is shipments to the European Union. China received 34.4 percent of its total imports from the U.S. last year, down from 45.3 percent in 2004-05. The European Union received 15.3 percent of its imports from the U.S., down from 31.2 percent in 2004-05. The U.S. accounted for 40 percent of exports to all destinations, down from 46.3 percent in 2004-05.

For the current year, the USDA projects U.S. soybean exports at a new record high of 1.145 billion bushels, accounting for 44.1 percent total projected exports from all origins. The majority (nearly 70 percent) of the projected year-over-year increase is in shipments to China. China is expected to import 1.175 billion bushels of soybeans from all sources, accounting for 46 percent of total world imports. China imported 1.04 billion bushels last year.

As of October 12, 6 weeks into the 2006-07 marketing year, the USDA reported that the U.S. had exported 123 million bushels of soybeans, 50 percent more than during the same period last year when shipments started very slowly. Unshipped sales as of October 12 were reported at 331 million bushels, compared to only 220 million on the same date last year. Accumulated shipments plus outstanding sales to China totaled 188 million bushels, up from 100 million at the same time a year ago. Early in the year, it appears that the U.S. export program is on pace to reach the USDA projection.

Exports during the last half of the 2006-07 marketing year will be influenced by the size of the 2007 South American harvest. The USDA currently projects that the 2007 harvest there will reach 3.85 billion bushels, 2.6 percent larger than the record harvest of 2006. Increases are forecast for Brazil (37 million bushels), Argentina (30 million), and Paraguay (26 million) (Table 6). Combined production in Bolivia and Uruguay is forecast

at 100 million bushels, 5 million above the 2006 crop.

The larger crop expectation for Brazil reflects an anticipated reduction in acreage and a rebound in average yield (Table 7). Argentina is expected to have a few more acres and a slightly higher yield, while all of the increase in Paraguay is expected to come from higher yields. There continues to be a wide difference of opinion about the magnitude of planted acreage in Brazil and whether or not Brazil can overcome the yield losses from soybean rust and poor weather in the past three years.

Production of other oilseeds outside of the U.S. in 2006-07 is projected at 156.2 million tons, down from 158.1 million in 2005-06 (calculated from Table 8). The decline reflects prospects for smaller peanut crops in China and India and reduced rapeseed production in China, Canada, Australia, and India. Less competition from these oilseeds supports the prospects for increased world consumption of soybeans.

The domestic crush of soybeans during the 2005-06 marketing year reached a record 1.739 billion bushels, 42.8 million above the crush of the previous year and 39.2 million above the previous record crush in 2001-02. The year-over-year increase occurred in the first quarter and particularly the fourth quarter (Table 5). Soybeans were once again crushed to meet the demand for soybean meal. The year-over-year increase in consumption of U.S. meal, however, came in the export market rather than the domestic market (Table 9). Meal exports were at an 8 year high of 7.85 million tons, while domestic consumption fell just short of the record use of a year earlier. The average oil content of the 2005 soybean crop was record large at 11.67 pounds per bushel. As a result, domestic oil inventories increased to a record 3.029 billion pounds at the end of the 2005-06 marketing year even though consumption increased by 713 million pounds (Table 10).

For the current marketing year, domestic soybean meal consumption should be supported by increasing livestock numbers and higher grain prices. The sharp increase in availability of distillers grain, however, will provide competition for soybean meal in both the domestic and export markets. An increase in corn used for ethanol production of 550 million bushels will result in an additional 5 million tons of distillers grain. Since distiller grain is lower in protein, it substitutes for soybean meal at a ratio of perhaps 0.55 to one. Five million tons, then, could displace 2.75 million tons of protein meal. Even so, the USDA projects a 0.75 million ton increase in domestic soybean meal consumption and a 0.5 million ton increase in U.S. soybean meal exports during the year. Allowing for imports of 165,000 tons, the USDA projects the domestic crush will need to total 1.775 billion bushels in the 2006-07 marketing year. Allowing for a small draw down in soybean meal stocks, our expectation is that the domestic crush may not reach the USDA projection due to somewhat softer domestic and export demand. We are projecting the crush at 1.765 billion bushels.

If 1.765 billion bushels of soybeans are crushed, about 19.945 billion pounds of soybean oil will be produced this year, if the average oil yield is a more typical 11.3 pounds per bushel. With imports of 55 million pounds and beginning stocks of 3.029 billion pounds, the available supply of oil this year will total 23.029 billion pounds, 650 million larger than last year's supply (Table 10), but 155 million less than projected by the USDA.

Domestic use of soybean oil typically increases at an average of about 2 percent per year, suggesting that use this year might be expected to total about 18.26 billion pounds. The USDA projects use at 19.2 billion pounds to account for the increasing use of soybean oil for bio-diesel production. Public data on the use of soybean oil for bio-diesel production is incomplete. The Census Bureau reports that 178.9 million pounds of once-refined soybean oil was used to produce methyl esters in August 2006. Use was reported at 141.5 million pounds in July, 169 million in June, 146 million in May and 106.6 million in April 2006. Consumption of

crude soybean oil for producing methyl esters is included in the "other inedible products" category, which totaled 60.2 million pounds in August 2006. The rate of increase in use of soybean oil for the bio-diesel industry appears to be larger than implied by the USDA's projection of total domestic use. We use a projection of 19.4 billion pounds, when combined with exports of 1.25 billion, results in a projection of total use of 20.65 billion pounds. Year ending stocks are then projected at 2.379 billion. Stocks are expected to shrink significantly, but remain at the high end of experience prior to 2005-06.

Price Prospects

Based on the analysis here, consumption of U.S. soybeans for all purposes during the current marketing year is projected at a record 3.095 billion bushels, leaving year ending stocks of 546 million bushels (Table 11). A year ending stocks-to-use ratio of 17.64 percent suggests that the 2006-07 marketing year average farm price should be near $5.50. That price would be generated by an average price of about $.25 per pound for soybean oil and $160 per ton for soybean meal. Based on similar analysis, the USDA projects the average in a range of $4.90 to $5.90. Given the strong speculative interest in soybean futures and quite high corn and wheat prices, soybean and soybean product prices may be supported at higher levels than suggested by historical relationships between stocks and price. As a result, projections of $5.75 per bushel for soybeans, $.255 per pound for soybean oil, and $165 per ton for soybean meal are used here.

The price of soybeans has increased sharply since mid-September. The average spot cash price in central Illinois increased from $5.175 on September 15 to $5.82 on October 19. November 2006 futures reached a contract low of $5.3675 on September 13 and traded to $6.135 on October 20. Futures prices for November 2006 through September 2007 translated into an average farm price for the marketing year of $6.00. Price strength in the face of a record harvest and projection of record U.S. and world stocks is surprising. The combination of heavy speculative buying and limited short hedging resulting from a slow harvest likely contributed to the sharp rally.

There is a general euphoria about owning agricultural commodities and the influx of traders who appear to be less price sensitive than traditional market participants complicates the task of anticipating future price movements. Strong early season exports, harvest delays, optimism about bio-diesel production and the realization that U.S. soybean acreage will decline in 2007 all appear to be contributing to the early price strength. November futures may have potential to move to the upside of the old trading range, perhaps to the $6.40 level. Further upside potential would seem to be limited by the size of the projected surplus. Prices, however, will likely be supported by high corn and wheat prices for the near term. Weather in Brazil may be the key for price direction until the first of the year. Harvest time price strength probably represents an opportunity to add to sales of the 2006 crop.

How Many Soybean Acres Are Needed?

With a mounting surplus of soybeans, prospects for large increases in corn consumption, and ideas that winter wheat acreage has increased, most expect that U.S. soybean acreage will decline in 2007. If current U.S. and world projections hold-up, some decline in acreage is warranted. If 2007-08 marketing year ending stocks of soybeans of 250 million bushels are adequate, if the 2007 U.S. average yield is 43 bushels per acre, and if there is a market for 3.14 billion bushels of U.S. soybeans in the 2007-08 marketing year, then harvested acreage in 2007 needs to total 66.1 million. Planted acreage would need to be about 67.1 million, 8.465 million fewer acres than planted in 2006.

Futures settlement prices on October 20 forecast the 2007-08 marketing year average price of corn at $3.20 and the average for soybeans at $6.50. That price relationship favors second year corn production over soybean production over a wide geographic area. It is important that the favorable

relationship for corn be maintained into the spring of 2007. The market cannot make the same mistake as in 2006 when it signaled more soybean acreage at the expense of corn acreage.

For the 2008-09 crop year, some would argue that soybean prices will have to move higher in order to encourage U.S. producers to maintain or increase soybean acreage. It is price ratios that matter, not necessarily the level of prices, in making planting decisions. For now, it makes little sense for a bidding war for acreage to develop in 2007-08. However, soybean prices will likely have to be high enough to encourage some expansion in South American acreage beginning in 2007. July 2008 futures are currently at $6.80. Based on current production costs, transportation costs, and exchange rates in Brazil, that price is likely high enough to encourage some expansion. Longer term, soybean prices will have to be high enough to keep production expanding in Brazil and corn prices will have to be attractive enough relative to that price to keep corn production expanding in the U.S.

Issued by Darrel Good
Extension Economist
University of Illinois

Table 1. United States Soybean Production Estimates

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
	million bushels																											
August 1	2,130	1,880	2,017	2,293	1,843	2,035	1,959	1,979	2,000	1,474	1,905	1,836	1,869	2,079	1,902	2,282	2,246	2,300	2,744	2,825	2,870	2,989	2,867	2,628	2,862	2,877	2,791	2,928
September 1	2,174	1,831	2,089	2,314	1,535	2,028	2,063	1,980	1,957	1,472	1,889	1,835	1,817	2,085	1,909	2,316	2,285	2,270	2,746	2,909	2,778	2,900	2,834	2,656	2,643	2,836	2,856	3,093
October 1	2,213	1,757	2,107	2,300	1,517	1,972	2,108	1,992	1,968	1,501	1,926	1,823	1,934	2,108	1,891	2,458	2,190	2,346	2,722	2,769	2,696	2,823	2,907	2,654	2,468	3,107	2,967	3,189
November 1	2,236	1,775	2,077	2,300	1,535	1,902	2,129	2,009	1,960	1,512	1,937	1,904	1,962	2,167	1,834	2,523	2,183	2,403	2,736	2,763	2,673	2,777	2,923	2,690	2,452	3,150	3,043	
January 1	2,268	1,817	2,030	2,277	1,595	1,861	2,099	2,007	1,905	1,539	1,927	1,922	1,986	2,197	1,809	2,558	2,152	2,382	2,727	2,757	2,643	2,770	2,891	2,730	2,418	3,141	3,086	
FINAL	2,261	1,798	1,989	2,190	1,636	1,861	2,099	1,943	1,938	1,549	1,924	1,926	1,987	2,190	1,870	2,515	2,174	2,380	2,689	2,741	2,654	2,758	2,891	2,756	2,454	3,124	3,063	

Table 2. United States Soybean Yield Estimates

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
	million bushels																											
August 1	30.3	27.4	30.2	32.3	29.7	30.5	31.5	32.9	34.7	26.0	32.3	32.5	31.8	35.8	33.8	37.6	36.4	36.3	39.5	39.5	39.2	40.7	38.7	36.5	39.4	39.1	38.7	39.6
September 1	30.9	27.0	31.2	32.6	24.9	30.3	33.2	33.1	34.0	25.9	32.0	32.4	31.0	35.9	34.0	38.2	37.0	35.8	39.3	40.6	37.9	39.5	38.2	37.0	36.4	38.5	39.6	41.8
October 1	31.5	26.0	31.5	32.4	24.7	29.5	33.9	33.3	34.2	26.4	32.6	32.3	33.0	36.3	33.7	40.5	35.5	37.0	39.0	38.7	37.0	38.7	39.2	37.0	34.0	42.0	41.6	42.8
November 1	31.8	26.5	31.0	32.4	25.0	28.5	34.2	33.8	34.1	26.6	32.8	33.7	33.5	37.3	32.7	41.5	35.4	37.9	39.2	38.6	36.7	38.0	39.4	37.5	33.8	42.6	42.7	
January 1	32.2	26.8	30.4	32.2	25.7	28.2	34.1	33.8	33.7	26.8	32.4	34.0	34.3	37.6	32.0	41.9	34.9	37.6	39.0	38.9	36.5	38.1	39.6	37.8	33.4	42.5	43.3	
FINAL	32.1	26.5	30.1	31.5	26.2	28.1	34.1	33.3	33.9	27.0	32.3	34.1	34.2	37.6	32.6	41.4	35.3	37.6	38.9	38.9	36.6	38.1	39.6	38.0	33.9	42.2	43.0	

Table 3. Soybean Planting Intentions, Actual Plantings, and Acres Harvested

Year	January Intentions	Mar./April Intentions	June/July Intentions	Actual	Harvested Acreage
			million acres		
1975	57.5	56.6	54.6	54.6	53.8
1976	50.9	49.3	49.0	50.3	49.4
1977	53.1	55.7	59.0	59.0	57.6
1978	63.9	63.7	64.0	64.7	63.3
1979	66.3	68.8	71.6	71.4	70.3
1980	71.6	71.3	70.3	69.9	67.8
1981	----	69.8	68.5	67.5	66.2
1982	69.5[a]	---	72.2	70.9	69.4
1983	68.8[a]	65.8[b]	63.3	63.8	62.5
1984	65.2[a]	---	68.0	67.8	66.1
1985	64.4[a]	---	63.3	63.1	61.6
1986	---	62.0	61.8	60.4	58.3
1987	---	56.9	58.7	58.180	57.172
1988	---	58.0	58.5	58.840	57.373
1989	---	61.7	61.3	60.820	59.282
1990		59.42	58.05	57.795	56.283
1991	58.5	57.12	59.78	59.180	58.169
1992		57.42	59.03	59.180	58.233
1993		59.30	61.58	60.085	57.307
1994		61.12	61.78	61.620	60.809
1995		61.45	63.105	62.495	61.544
1996		62.478	63.895	64.195	63.349
1997		68.800	70.850	70.005	69.110
1998		72.000	72.720	72.025	70.441
1999		73.105	74.205	73.730	72.446
2000		74.871	74.501	74.266	72.408
2001		76.657	75.416	74.075	72.975
2002		72.966	72.993	73.963	72.497
2003		73.182	73.653	73.404	72.476
2004		75.411	74.809	75.208	73.958
2005		73.910	73.103	72.142	71.361
2006		76.895	74.930	75.565	74.505

[a] February 1

[b] May 1

Table 4. Planted Acres of Soybeans by Region

	Western Corn Belt[a]		Eastern Corn Belt[b]		Mid-South[c]		Southeast[d]		East Coast[e]		United States	
Region	000 acres	%	000 acres	%	000 acres	%	000 acres	%	000 acres	%	000 acres	%
1976	16,145	32.1	14,530	28.9	13,630	27.1	4,799	9.6	1,122	2.3	50,226	100.0
1979	23,370	32.7	19,620	27.5	18,470	25.9	8,360	11.7	1,591	2.2	71,411	100.0
1986	24,875	41.2	18,300	30.3	10,995	18.2	4,680	7.8	1,535	2.5	60,385	100.0
1987	24,120	41.5	18,580	31.9	10,330	17.8	3,675	6.3	1,475	2.5	58,180	100.0
1988	24,310	41.3	18,680	31.7	10,460	17.8	3,810	6.5	1,580	2.7	58,840	100.0
1989	24,790	40.8	19,020	31.3	10,750	17.7	4,460	7.3	1,800	2.9	60,820	100.0
1990	23,750	41.1	18,490	32.0	10,270	17.2	3,650	6.3	1,635	2.8	57,795	100.0
1991	26,035	44.0	19,420	32.8	8,990	15.2	3,005	5.1	1,730	2.9	59,180	100.0
1992	25,400	42.9	20,000	33.8	8,980	15.2	2,915	5.2	1,715	2.9	59,180	100.0
1993	25,300	42.1	20,410	34.0	9,690	16.1	2,915	4.9	1,770	2.9	60,085	100.0
1994	27,220	44.1	20,510	33.3	9,220	15.0	2,875	4.7	1,795	2.9	61,620	100.0
1995	28,210	45.1	21,130	33.8	9,130	14.7	2,290	3.6	1,735	2.8	62,495	100.0
1996	28,250	44.0	22,370	34.8	9,390	14.6	2,565	4.0	1,620	2.5	64,195	100.0
1997	32,450	46.4	22,610	32.3	10,390	14.8	2,777	4.0	1,778	2.5	70,005	100.0
1998	33,700	46.8	23,650	32.8	10,180	14.1	2,690	3.8	1,805	2.5	72,025	100.0
1999	35,800	48.5	24,100	32.7	9,700	13.2	2,360	3.2	1,770	2.4	73,730	100.0
2000	37,050	49.9	24,050	32.4	9,010	12.1	2,230	3.0	1,926	2.6	74,266	100.0
2001	37,700	50.9	24,650	33.3	7,685	10.4	2,135	2.9	1,905	2.5	74,075	100.0
2002	37,070	50.1	24,740	33.5	8,170	11.0	2,145	2.9	1,838	2.5	73,963	100.0
2003	37,650	51.3	23,770	32.4	7,990	11.3	2,253	3.0	1,741	2.4	73,404	100.0
2004	38,000	50.5	23,550	31.4	9,100	12.1	2,579	3.4	1,979	2.6	75,208	100.0
2005	36,450	50.5	23,010	31.9	8,495	11.8	2,259	3.1	1,928	2.7	72,142	100.0
2006	38,700	51.2	24,100	31.9	8,730	11.6	2,107	2.8	1,928	2.5	75,565	100.0

[a] Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota

[b] Illinois, Indiana, Michigan, Ohio, Wisconsin

[c] Arkansas, Kentucky, Louisiana, Mississippi, Oklahoma, Tennessee, Texas

[d] Alabama, Florida, Georgia, North Carolina, South Carolina

e Delaware, Maryland, New Jersey, New York, Pennsylvania, Virginia, West Virginia

Table 5 Soybean Quarterly Balance Sheet

	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
												million bushels												
September 1 stocks	254 5	344 6	175 7	316.1	536 4	436 4	302.5	182 0	239 1	329 0	278 4	292.3	209 1	334 8	183 5	131 8	199 8	348 5	290 2	247.7	208.0	178 3	112 4	255 7
Production	2,190.3	1,635 8	1,860 9	2,099 1	1,942.6	1,937 7	1,548 8	1,923 8	1,925 9	1,986 6	2,190 4	1,869.7	2,514 9	2,174 3	2,380 3	2,688 8	2,741.0	2,653 8	2,757 8	2,890.7	2,756 1	2,453 7	3,123 7	3,063 2
TOTAL	2,444 8	1,980 4	2,036 6	2,415 2	2,479 0	2,374 1	1,855.3	2,108 8	2,167 0	2,319 6	2,470 8	2,167.0	2,730'0	2,514.1	2,572 8	2,825.6	2,943 8	3,006 3	3,052 0	3,141.3	2,968 8	2,637 6	3,241 7	3,322 9
September-November																								
Crush	284 2	269 6	253 7	267.5	295 8	293 4	275 4	273 0	304 1	322 0	328.2	329 6	346 2	351 4	360.6	395.8	409.3	426 7	420 9	427.5	417 5	419 4	427 4	442 4
Export	245 9	190.6	153 4	166 5	216 5	260 8	138.3	168.5	120.1	167 1	235 9	176 0	230 9	233 6	289 7	365.3	268.5	297 8	315 5	348 6	320 4	385 7	405 8	312 6
Seed, residual	-36 2	48 5	14 8	21.5	10 1	64.6	74 8	56 6	58 8	51 5	70.7	79.8	50 9	95 7	97.4	66 9	78.5	98 9	75 6	89 6	112.3	140 5	99 3	62 5
TOTAL	493 9	508.7	421 9	455.4	522.4	618 8	488.5	498.1	483.0	540 6	634.8	585.4	628 0	681 7	747 7	826.2	758.8	823 4	812 0	865.7	850 2	945 6	932 4	817.5
December 1 stocks	1,950.9	1,471.7	1,614 7	1,959 8	1,956 6	1,755.3	1,366.8	1,610.7	1,684.0	1,779 0	1,836.0	1,573.6	2,102 0	1,833 4	1,825 1	1,999 4	2,186.4	2,182.7	2,240.0	2,275 6	2,115 4	1,688 7	2,304 6	2,502 1
Crush	314 9	262 5	276 4	281.9	320 1	317 3	286 3	304 3	301.4	323 1	335.2	327.2	371.8	359 0	400 7	443 1	408 6	408.1	417 9	447.6	422.0	423 2	436 2	437.2
Export	263 6	234 6	230 2	270 9	233 7	258 9	197.0	217 0	179.7	259 6	255.9	212.7	283.5	278 7	333 1	306 4	243.1	315 4	338.4	422 7	425 5	335 1	400 2	311.4
Seed, residual	26 6	18 8	47 0	35 7	63 8	33.0	-6 7	33 9	12 8	19 6	29 3	12.1	76 5	5.3	35 5	46.9	77.0	63 2	79.8	69 3	66 9	25 9	88.3	85.1
TOTAL	605.1	515 9	553 6	588 5	617 6	609.2	476.6	555.2	493.9	602 3	620.4	552 0	731.8	643 0	769 3	796 5	728 7	786 7	836.1	939.6	914.4	784 2	924.7	833.7
March 1 stocks	1,345.8	955.8	1,061.1	1,371.3	1,339.0	1,146.1	890 2	1,055 5	1,190.1	1,177 3	1,215.6	1,021.6	1,370 2	1,190 4	1,055 8	1,202.9	1,457.3	1,396.0	1,403.9	1,336.0	1,202 0	905 8	1,381.4	1,669 2
Crush	260 1	240 0	258 2	262.3	297.2	308 3	270.1	290.7	295.5	304 0	325 4	320.4	361 7	334 0	355 7	404.9	396 4	373.9	405.4	429.6	400 2	359 5	430 7	431 3
Export	216 2	204 2	153 4	226.4	159 3	185 0	135.5	153 2	146.9	148 2	186 7	120.6	216 6	188 5	165 9	120.0	161.9	205.8	220 8	155.0	194 4	117 6	211 2	185.5
Seed, residual	78.9	39.9	41 1	33 7	45 7	-2.5	20.1	15 7	24 2	29 4	20.1	25.3	0.0	44 9	34.3	84.4	50.4	58 9	69.5	66 5	6 3	19 1	41 1	62.7
TOTAL	555 2	484 1	452 7	522 4	502 2	490.8	425 7	459 6	466.6	481 6	532.2	466.3	578 3	567 4	555 9	609.2	608 7	621.8	695.7	651.1	600 9	496.2	683 1	679 5
June 1 stocks	790.6	471 7	608 4	848 9	836 8	655.3	464 5	595 9	723.5	695 7	683 4	555.3	791.9	622 8	499 9	593.7	848 6	774.4	708 2	684 9	602 4	410 6	699 3	990.7
Crush	248.8	210.6	242 1	241.1	265.5	255.5	225.8	278 4	285.9	304 6	290 0	298.4	325 5	324.9	318.7	353.2	375 4	370 1	395 8	395.0	375.6	327.6	401 8	428 0
Export	179 5	113 6	61 1	76.3	147 4	97.6	56 2	84 2	110 4	109 0	91.0	79.7	107 0	150 5	93 0	78.7	127 5	171.6	121 3	137 2	104.1	48 5	85 5	137.7
Seed, residual	17 7	-28 2	-10 9	-4 9	-12.5	0.3	0.5	-5.8	-1 8	3 1	10.1	-31.9	24 6	-35.2	-43 6	-37.9	-1.3	-55 0	-56 6	-55.3	-54.7	-71.0	-41 6	-22 3
TOTAL	446 0	296.0	292.3	312.5	400.4	352.8	282 5	356 8	394.5	416.7	391.1	346.2	457.1	439.6	368 1	393.9	501 6	486 7	460.5	476.9	425.0	299.1	445.8	543.4
September 1 stocks	344 6	175 7	316 1	536.4	436 4	302.5	182 0	239 1	329.0	278 4	292.3	209.1	334 8	183 5	131.8	199.8	348.5	290.2	247.7	208.0	178.3	112.4	255.7	448 8
Annual																								
Crush	1,108 0	982.7	1,030 4	1,052 8	1,178.7	1,174.5	1,057.6	1,146 4	1,186.9	1,253 7	1,278.8	1,275.6	1,405.2	1,369.4	1,435 7	1,595.1	1,589 7	1,578 8	1,650 0	1,699 7	1,615 3	1,529.7	1,696 1	1,738.9
Export	905 2	743 0	598 1	740 1	756 9	801.7	527 0	622 9	557 1	683 9	769 5	589 0	838 0	851 2	881 7	870 4	801 0	973 8	996 0	1,063.5	1,045.0	887 2	1,102.7	947 2
Seed, residual	87 0	79 0	92 0	85 9	107 0	95.4	88 7	100 4	94 0	103 6	130 2	85 3	152 0	110 4	123 6	160 3	204 6	166 2	168 3	170.1	130 2	108 5	187.2	188.0
TOTAL	2,100 2	1,804.7	1,720 5	1,878 8	2,042 6	2,071.6	1,673.3	1,869 7	1,838.0	2,041 2	2,178 5	1,949.9	2,397 0	2,330.9	2,441.0	2,625 8	2,595.3	2,718 8	2,803 1	2,933.3	2,790.5	2,525 5	2,986.0	2,874.1

Table 6. Soybean Production by Country

Year	United States	Brazil[a]	Argentina[a]	Paraguay[a]	China	Other	World	All Foreign
				million bushels				
1970	1,127	76	2	3	254	165	1,627	500
1971	1,176	135	3	4	290	126	1,734	558
1972	1,283	184	10	4	320	66	1,867	584
1973	1,547	289	18	7	367	64	2,292	745
1974	1,215	363	18	8	349	54	2,007	792
1975	1,547	413	26	10	367	46	2,409	862
1976	1,288	460	51	14	242	128	2,183	895
1977	1,762	350	99	12	266	154	2,643	881
1978	1,870	557	136	20	278	167	2,847	977
1979	2,261	376	132	21	274	191	3,255	994
1980	1,798	558	129	22	292	176	2,975	1,177
1981	1,989	471	152	22	342	186	3,162	1,173
1982	2,190	542	154	19	332	200	3,437	1,247
1983	1,636	571	257	20	359	213	3,056	1,420
1984	1,861	672	248	35	356	248	3,421	1,561
1985	2,099	518	268	22	386	272	3,565	1,466
1986	1,943	636	257	35	427	303	3,601	1,658
1987	1,938	662	356	40	457	359	3,812	1,874
1988	1,549	852	235	60	428	387	3,506	1,957
1989	1,924	747	395	58	376	445	3,945	2,020
1990	1,926	579	423	48	404	446	3,826	1,900
1991	1,987	709	410	48	357	435	3,946	1,959
1992	2,188	827	417	64	378	434	4,308	2,120
1993	1,871	908	456	66	563	454	4,318	2,447
1994	2,517	952	459	81	588	460	5,057	2,540
1995	2,177	887	457	88	496	487	4,591	2,415
1996	2,380	1,003	412	102	486	474	4,857	2,477
1997	2,689	1,194	717	110	551	545	5,806	3,117
1998	2,741	1,150	735	112	557	577	5,872	3,131
1999	2,654	1,257	779	107	525	527	5,875	3,221
2000	2,758	1,433	1,021	129	566	525	6,432	3,674
2001	2,891	1,598	1,102	130	566	506	6,793	3,902
2002	2,756	1,911	1,304	165	607	500	7,243	4,487
2003	2,454	1,874	1,212	144	565	613	6,862	4,408
2004	3,124	1,947	1,433	149	639	643	7,935	4,811
2005	3,063	2,021	1,488	147	601	692	8,012	4,949
2006	3,189	2,058	1,518	173	595	719	8,252	5,063

[a] Harvested in the spring of the following year.

Table 7. South American Soybean Area, Yield and, Production, 1988 to Date

	Brazil			Argentina			Paraguay		
	Area	Yield	Production	Area	Yield	Production	Area	Yield	Production
Year	mil. ha.	t/ha.	mil.t	mil. ha.	t/ha.	mil. t.	mil. ha.	t/ha.	mil. t.
1988-89	12.15	1.94	23.60	4.00	1.63	6.50	0.85	1.90	1.62
1989-90	11.55	1.76	20.34	4.95	2.17	10.75	0.98	1.61	1.58
1990-91	9.75	1.62	15.75	4.75	2.42	11.50	0.89	1.46	1.30
1991-92	9.70	1.99	19.30	4.80	2.32	11.15	0.90	1.44	1.30
1992-93	10.63	2.12	22.50	4.90	2.32	11.35	0.98	1.79	1.75
1993-94	11.44	2.16	24.70	5.40	2.30	12.40	1.05	1.71	1.80
1994-95	11.68	2.22	25.90	5.70	2.19	12.50	1.10	2.00	2.20
1995-96	10.95	2.21	24.15	5.98	2.08	12.43	1.10	2.18	2.40
1996-97	11.80	2.27	26.80	6.26	1.81	11.20	1.20	2.31	2.77
1997-98	13.00	2.50	32.50	6.95	2.80	19.50	1.20	2.49	2.99
1998-99	12.90	2.43	31.30	8.17	2.45	20.00	1.20	2.54	3.05
1999-00	13.60	2.51	34.20	8.58	2.47	21.20	1.15	2.52	2.90
2000-01	13.93	2.80	39.00	10.40	2.67	27.80	1.35	2.61	3.52
2001-02	16.35	2.66	43.50	11.40	2.63	30.00	1.45	2.45	3.55
2002-03	18.45	2.82	52.00	12.60	2.82	35.50	1.55	2.90	4.50
2003-04	21.52	2.37	51.00	14.00	2.36	33.00	1.75	2.23	3.91
2004-05	22.92	2.31	53.00	14.40	2.71	39.00	2.00	2.03	4.05
2005-06	22.00	2.50	55.00	15.20	2.66	40.50	2.00	2.00	4.00
2006-07	21.00	2.67	56.00	15.40	2.68	41.30	2.00	2.35	4.70

Source: USDA, FAS

Table 8. World Oilseed and Soybean Production

	Major Oilseeds			Soybeans		
Year	United States	Ex-United Stated	Total	United States	Ex-United States	Total
			million metric tons			
1977-78	56.5	93.7	150.2	47.95	23.98	71.93
1978-79	58.6	92.0	150.6	50.86	26.62	77.48
1979-80	72.4	98.1	170.5	61.72	31.79	93.51
1980-81	55.8	99.8	155.6	48.77	32.20	80.97
1981-82	64.0	105.5	169.5	54.13	31.93	86.06
1982-83	68.2	110.1	178.3	59.61	33.96	93.57
1983-84	50.4	115.1	165.5	44.52	38.64	84.16
1984-85	59.2	131.7	191.1	50.64	42.50	93.14
1985-86	65.4	130.8	196.2	57.13	39.92	97.05
1986-87	59.4	135.0	194.4	52.87	45.21	98.08
1987-88	60.6	150.0	210.6	52.75	51.06	103.81
1988-89	50.3	153.9	204.2	42.15	53.49	95.64
1989-90	59.3	153.1	212.4	52.35	55.02	107.37
1990-91	60.6	155.1	215.7	52.42	51.57	103.99
1991-92	64.3	160.0	224.3	54.07	53.31	107.38
1992-93	68.4	158.9	227.4	59.61	57.69	117.30
1993-94	59.5	168.4	227.9	50.92	66.58	117.50
1994-95	79.7	181.2	260.9	68.49	69.14	137.63
1995-96	69.1	190.6	259.7	59.24	65.72	124.96
1996-97	74.8	187.0	261.8	64.78	67.40	132.18
1997-98	83.1	203.9	287.0	73.18	84.90	158.07
1998-99	84.4	210.3	294.7	74.60	85.21	159.81
1999-00	82.3	221.1	303.4	72.22	87.68	159.90
2000-01	84.9	228.5	313.4	75.06	100.00	175.06
2001-02	89.8	235.3	325.1	78.67	106.20	184.87
2002-03	83.9	245.7	329.6	75.01	122.11	197.12
2003-04	76.6	258.3	334.9	66.78	119.97	186.75
2004-05	95.9	285.3	381.3	85.01	130.94	215.95
2005-06	95.5	292.8	388.3	83.37	134.67	218.04
2006-07	96.4	294.0	390.4	86.78	137.81	224.59

[1]WASDE Oct. 2006 and earlier.

Table 9. Soybean Meal Balance Sheet -- Years Beginning October 1

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
	thousand tons																	
Beginning stocks	173	318	285	230	204	150	223	212	210	218	330	293	383	240	220	211	172	300
Production	27,719	28,325	29,831	30,364	30,514	33,270	32,527	34,210	38,176	37,792	37,591	39,385	40,292	38,213	36,325	40,715	41,631	42,050
TOTAL[a]	27,982	28,688	30,183	30,687	30,788	33,483	32,825	34,524	38,443	38,109	37,970	39,729	40,818	38,619	36,830	41,073	41,500	42,515
Domestic	22,291	22,934	23,007	24,251	25,283	26,542	26,611	27,320	28,895	30,657	30,345	31,643	33,070	32,379	31,449	33,561	33,350	34,020
Exports	5,319	5,469	6,946	6,232	5,356	6,717	6,002	6,994	9,330	7,122	7,332	7,703	7,508	6,019	5,170	7,340	7,850	8,245
TOTAL	27,610	28,403	29,953	30,483	30,639	33,260	32,613	34,314	38,225	37,779	37,677	39,346	40,578	38,399	36,619	40,901	41,200	42,265
Ending stocks	318	285	230	204	150	223	212	210	218	330	293	383	240	220	211	172	300	250
Price[b]	$186.48	$181.38	$189.21	$193.75	$192.86	$162.55	$235.92	$270.90	$185.28	$138.55	$167.70	$173.60	$167.73	$181.57	$256.05	$182.89	$174.17	$165.00

[a] Includes imports

[b] Bulk, Decatur, Illinois 48%

Table 10. Soybean Oil Balance Sheet -- Years Beginning October 1

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
	million pounds																	
Beginning stocks	1,715	1,305	1,786	2,239	1,555	1,103	1,137	2,015	1,520	1,382	1,520	1,995	2,767	2,358	1,489	1,076	1,699	3,029
Production	13,003	13,406	14,346	13,778	13,951	15,613	15,240	15,752	18,143	18,081	17,825	18,420	18,898	18,438	17,080	19,360	20,345	19,945
TOTAL[a]	14,740	14,728	16,132	16,027	15,574	16,733	16,472	17,821	19,723	19,546	19,427	20,488	21,711	20,843	18,875	20,462	22,079	23,029
Domestic	12,082	12,163	12,246	13,053	12,941	12,916	13,465	14,263	15,262	15,655	16,056	16,320	16,833	17,089	16,864	17,439	17,900	19,400
Exports	1,353	779	1,647	1,419	1,529	2,680	992	2,037	3,079	2,372	1,376	1,401	2,519	2,263	936	1,324	1,150	1,250
TOTAL	13,435	12,942	13,893	14,472	14,471	15,596	14,457	16,300	18,341	18,027	17,432	17,721	19,353	19,352	17,800	18,763	19,050	20,650
Ending stocks	1,305	1,786	2,239	1,555	1,103	1,137	2,015	1,520	1,382	1,520	1,995	2,767	2,358	1,491	1,076	1,699	3,029	2,379
Average Price[b]	22.3¢	21.0¢	19.1¢	21.4¢	27.1¢	27.6¢	24.75¢	22.5¢	25.8¢	19.9¢	15.6¢	14.2¢	16.5¢	22.0¢	30.0¢	23.0¢	23.4¢	25.5¢

Table 11. Soybean Balance Sheet -- Years Beginning September 1

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07[a]
	million bushels																	
Carryin	182	239	329	278	292	209	335	183	132	200	348	290	248	208	178	112	256	449
Production	1,924	1,926	1,987	2,190	1,870	2,515	2,174	2,380	2,689	2,741	2,654	2,758	2,891	2,756	2,454	3,124	3,063	3,189
TOTAL[b]	2,109	2,167	2,320	2,470	2,168	2,729	2,514	2,573	2,826	2,944	3,006	3,052	3,141	2,969	2,638	3,242	3,323	3,641
Crush	1,146	1,187	1,254	1,279	1,276	1,405	1,369	1,436	1,597	1,590	1,578	1,640	1,700	1,615	1,530	1,696	1,739	1,765
Export	623	557	684	770	589	838	851	882	870	805	975	996	1,064	1,045	887	1,097	948	1,145
Seed, feed, residual	101	94	103	129	94	151	111	123	159	201	163	169	169	131	109	192	188	185
TOTAL	1,870	1,838	2,041	2,178	1,954	2,394	2,331	2,441	2,626	2,596	2,716	2,804	2,933	2,791	2,526	2,986	2,874	3,095
Carryout	239	329	278	292	209	335	183	132	200	348	290	248	208	178	112	256	449	546
U.S. Average price	$5.70	$5.75	$5.58	$5.60	$6.40	$5.48	$6.77	$7.35	$6.47	$4.93	$4.63	$4.54	$4.38	$5.53	$7.34	$5.74	$5.66	$5.75

[a] Projected

[b] Includes imports